M/039/013
cc: Peter
Lynn

Form MR-LMO (altered for applicant clarity)*

For Division Use Only
File #: M/
Date Received:
DOGM Lead:

To: State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
1594 West North Temple Suite 1210
Box 145801
Salt Lake City, Utah 74114-5801
(801) 538-5291 office
(801) 359-3940 fax

NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATION

The information requirements in this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, General Rules and Rules of Practice and Procedures

This form applies only to mining operations, which disturb or will disturb more than five acres at any given time.

MINING OPERATIONS means those activities conducted on the surface of the land for the exploration for, development of, or extraction of a mineral deposit, including, but not limited to, surface mining and the surface effects of underground and in situ mining, on-site transportation, concentrating, milling, evaporation, and other primary processing.

MINING OPERATION does not include the extraction of sand, gravel, and rock aggregate; the extraction of oil and gas as defined in Chapter 6, Title 40; the extraction of geothermal steam; smelting or refining operations; off-site operations and transportation; or reconnaissance activities which will not cause significant surface resource disturbance or involve the use of mechanized earth-moving equipment such as bull dozers or backhoes.

PLEASE NOT:
This form is to be used as a guideline in assembling the information necessary to satisfy the Large Mining Operations Notice of Intention requirements. You will need extra space to provide a majority of the information requested. Please provide the information on additional sheets and include cross-referenced page numbers as necessary. The operator may submit this information on an alternate form; however, the same or similar format must be used.

*Official Form MR-LMO has been altered by applicant in order to clearly separate out each requirement. Content / requirements remain the same. Some grammatical corrections have been made.

I Rule R647-4-104 Operator(s), Surface and Mineral Owners

The operator must provide the name, address and telephone number of the individual or company who will be responsible for the proposed operation. If a company is to be listed as the operator, then the name of the corporate officers need to be provided.

1. Mine Name: B&C Limestone (individually owned and operated)

2. Name of Applicant or Company:
   Bryce H. Haas
   331 East 200 South
   Lindon, Utah 84042
   801-7966130 home
   801-796-6062 fax
   801-xxx-xxxx cell

3. Permanent address: Same as above

4. Company Representative or Operator: Same as above

5. Location of Operation:
   Per Permit No. 48313-MP (issued July 1, 1999 by SITLA)
   Sanpete County, T18S, R1E, SLB&M, Sec. 32: S2SW4

The names of the surface and mineral owners for any areas, which are to be impacted by mining, must be provided to the Division. This list should include all private, state, and federal ownership and the owners of lands immediately adjacent to the project areas.

6. Ownership of the land surface (underline all that apply)
Private (Fee), Public Domain (BLM), National Forest (USFS), **State of Utah (SITLA)**, or other.
   State of Utah
   Dept. of Natural Resources
   Division of Oil, Gas, and Mining
   1594 West North Temple Suite 1210
   PO Box 145801
   Salt Lake City, Utah 84114-5801

7. Owner(s) of record of the mineral to be mined: **State of Utah (SITLA)**

8. Have the above owners been notified in writing? Yes. Permit No. 4831MP was issued and a surety bond secured.

9. Does the above owner(s) have legal right to enter and conduct mining operations on the land covered by this notice? Yes. See (question 8) above.

Drafted September 22, 1997

PROOFREAD JTB BHP MINERAL COMMODITY MATERIALS PERMIT NO. 48313-MP

MINERALS PERMIT APPLICATION NO. ML 48313-MP GRANT:SCH

AMENDMENT TO

THE STATE OF UTAH
SCHOOL AND INSTITUTIONAL TRUST LANDS ADMINISTRATION
MINERAL COMMODITY MATERIALS PERMIT

In consideration of the rentals and materials purchases to be paid and the covenants to be kept and performed, the School and Institutional Trust Lands Administration, hereinafter referred to as "Permitter," does hereby permit unto:

Bryce Haas
331 East 200 South
Lindon, UT 84042

hereinafter referred to as "Permittee," the right to come onto the following described lands situated in Sanpete County, State of Utah:

T18S, R1E, SLB&M
Sec. 32: S2SW4

containing 80.00 acres, more or less, for the purposes described below.

This permit shall remain in effect, unless sooner terminated as herein provided, for a term of 3 years, beginning July 1, 1999.

This permit is granted subject to the following terms and conditions:

1. This permit will terminate three Yr.(s) from the date of execution unless extended at the sole discretion of the Permitter, at the end of said period, for a subsequent period as determined by the Permitter. Permittee may reject any such extension of the permit by failing to timely submit the required annual rental payment.

2. Permittee shall have the right to mine and remove the following described mineral commodity from the above described property.

Mineral Commodity: Limestone

3. Permittee shall pay the Permitter as advance rental for the above described property $10.00 per acre each year or fraction of a year that this permit is in effect. The first advance rental payment shall be paid along with the application filing fee for this permit. Subsequent advance rental payments shall be paid promptly on or before each annual anniversary date of the effective date of this permit for each year or fraction of a year that this permit or any extension thereof is in effect. Also, Permittee shall pay the Permitter the greater amount of five per cent (5%) gross value or a dollar amount per Short Ton as per the following schedule of limestone rock product type, F.O.B. Mine, of the Mineral Commodity removed form the permit lands.

Limestone Rock Product Type	% Gross Value or Dollar/Short Ton
Decorative Building Stone or flagstone	5% or $7.00/st
Rip rap or landscape boulders	5% or $2.50/st
Crushed aggregate or road-base	5% or $0.25/st

Such payment shall be supported by a Permitter-approved "Production and Settlement Transmittal Form" which shall be submitted by the permittee monthly not more than 30 days following the end of each month in which excavation and

removal of the mineral commodity occurs from the subject lands. Permittee may credit annual rental payments toward commodity purchase payments accruing to the permit in the same permit year. Permittee shall maintain accurate records as to dates, quantities, and measurements of excavation occurring in the permit area and shall allow Permitter to freely examine such records at any time. Permitter reserves the right to adjust the annual rental and/or price for the purchase of the mineral commodity for any subsequent permit year, annually, at the end of each permit year in which this permit is still in effect, if, in Permitter's opinion, such a change is in the best interest of the State of Utah.

4. The mineral commodity purchase payment which is required by paragraph three is based on the excavation and removal of the subject mineral commodity in marketable form. If the mineral commodity is otherwise processed prior to sale or use by the Permittee the approval of the Permitter must first be had and obtained, and the purchase price paid for such materials will be subject to change.

5. Permitter reserves the right to terminate this permit and refund uncredited advance rental and advance mineral commodity purchase payments paid by Permittee, in whole or in part, after not less than 30 days written notice by registered mail, should it desire to do so for any reason whatsoever. Permitter reserves the right to sell or exchange the above described property, in whole or in part, as it may deem to be in the best interest of the State of Utah.

6. Permittee may stockpile on the permit premises the mineral commodity which has been excavated and for which Permitter has received purchase payment providing, however, that Permittee shall totally remove all such stockpiles not less than 30 days following the termination or expiration of this permit. Permittee shall not stockpile material which has been excavated from a location other than the permitted premises without the express, written consent of the Permitter.

7. Permitter reserves the right to lease or permit said property to third persons for mining or exploration for coal, oil, and gas and all other minerals, except the specific mineral commodity covered by this permit, or for purposes of grazing or other uses of the surface lands.

8. Permittee shall at all times comply with all provisions of applicable laws, rules, and regulations of the State of Utah, including the Rules Governing the Management and Use of School and Institutional Trust Lands in Utah, and will be deemed modified whenever such laws, rules, or regulations are amended hereafter.

9. Permittee shall not assign, sub-lease, mortgage, pledge, or otherwise dispose of any interest in this permit without the written consent of Permitter. Any such action by Permittee not so having the written consent of Permitter shall be void <u>ab initio.</u>

10. It is understood this permit is issued only under such title as Permitter may have, and that Permitter does not warrant its title; and, in case of title failure, Permittee shall not be entitled to claim any refund of rental or purchase payments made to Permitter.

7 11. If the Permittee shall initiate or establish any water right on or for use on the permitted premises, such right shall become an appurtenance of the permitted premises; and, upon the termination of the permit, the Permittee shall convey the right to the Permitter.

12. Permittee agrees to furnish Permitter a performance and reclamation bond in such type and amount and by such date as Permitter may request. Further, it is expressly agreed that Permitter may at any time, upon 30 days notice by

certified mail, require Permittee to furnish Permitter such additional performance and reclamation bond as Permitter may deem to be in the best interest of the State of Utah.

13. Permittee agrees to perform, following the completion of excavations, such reclamation measures as may be required by Permitter to stabilize and restore natural surface conditions. Such reclamation measures will generally consist of, but not necessarily be limited to, elimination of highwalls, contouring of slopes at a ratio not less than three feet horizontal for each one foot vertical, elimination of access roads, replacement of natural top soils, revegetation using such seed mixture and concentration of application as may be specified by Permitter, removal of all trash and debris, and removal of all equipment, buildings and structures owned by the Permittee or Permittee's agents.

14. Permittee agrees to submit to Permitter a detailed plan of operations, not less than 60 days prior to the commencement of such planned operations. The detailed plan of operations shall include such information and maps as may be required by Permittee to evaluate the impact of the proposed mining operation and surfaces disturbances upon the lands and upon other natural and cultural resources upon the lands. Permitter may request additional information or modification of Permittee's plan of operations, and Permittee shall not proceed with excavations without first receiving from Permitter a written approval of such plan of operations. Permittee shall also provide such notice of operations to the Utah Division of Oil Gas & Mining as required by law. Permittee shall also give notice to all owners, lessees and permittees of record of the surface estate and the mineral estate prior to entering upon the permit lands to conduct any excavations or mining operations of any kind. Permittee shall submit to Permitter a report of all excavations, surface disturbances, production, and reclamation work performed upon the subject lands each year or fraction of a year that this permit is in effect. Such report shall be submitted at least 30 days prior to the anniversary date of each year that this permit is in effect and shall also be submitted within at least 30 days following the termination or expiration of this permit.

15. Permittee shall take reasonable precautions to protect, in place, all public land survey monuments, and private property corners. Permittee shall conduct all operations under this purchase agreement in a lawful, prudent, and good workmanlike manner, shall avoid unnecessary damage and injury to the surface or underlying estate, and shall not commit damage and wastage of other natural resources not covered by this purchase agreement.

16. It is hereby understood and agreed that all treasure trove and all articles of antiquity in or upon the subject lands are and shall remain the property of the State of Utah. Permittee shall report any discovery of a "site" or "specimen" to the Division of State History in compliance with the provisions of Section 63-18-27, Utah Code Annotated (1953), as amended.

17. Permittee agrees to indemnify and hold Permitter harmless from and against any claim or cause of action, including payment of reasonable attorney's fees, for injury or damage to person or property in any way caused by or arising out of the activity upon the premises of Permittee, its servants, employees, agents, sublessees, assignees, or invitees, or by any other conduct or transactions of Permittee pursuant to this permit.

18. Failure to pay the agreed rental or materials purchase payments for a period of one month from the time said fees are due or any breach of any term of condition of this permit by Permittee shall work a forfeiture of the permit, after 30 days notice by certified mail, return receipt requested, unless the deficiency or breach is corrected or remedied to the satisfaction of Permitter within said 30-day period.

19. Permittee may at any time apply to relinquish all right, title and interest in this permit by providing written notice in affidavit form to Permitter. Permitter may approve said relinquishment, subject to Permittee's obligation to perform reclamation of disturbed areas and to pay Permittee all outstanding rental or materials purchase payment obligations which may have accrued to the permit.

20. The PERMITTER has the right to audit PERMITTEE'S performance of the terms and conditions of this permit. Nevertheless, it is the continuing duty of the PERMITTEE to faithfully perform all of the terms, conditions, and obligations of this permit, including, but not limited to, the duty to properly calculate and render to the PERMITTER any and all amounts due. Any term, condition, provision, or obligation subject to change or interpretation shall be deemed self-executing, and shall in no way shift or relieve the PERMITTEE of its continuing duties and obligations.

IN WITNESS WHEREOF, the parties have executed this permit as of the date hereinabove first written.

Permitter: STATE OF UTAH
SCHOOL AND INSTITUTIONAL
TRUST LANDS ADMINISTRATION

Approved as to form:
Utah Attorney General
Jan Graham

David T. Terry, Director

By: _____
John W. Andrews

By: _____
THOMAS B. FADDIES, DIRECTOR/MINERALS

Permittee: _____
Bryce Haas

STATE OF UTAH)
: ss
COUNTY OF SALT LAKE)

On the 8th day of May, ~~19~~ 2000, personally appeared before me Thomas B. Faddies who being by me duly sworn did say that he is the Director/Minerals of the School and Institutional Trust Lands Administration of the State of Utah, and the signer of the above instrument, who duly acknowledged that he executed the same.

Given under my hand and seal this 8th day of May, ~~19~~ 2000.

Dawnyell Gallien
Notary Public, residing at: SLC, UT

My Commission Expires: 1-13-2002

DAWNYELL GALLIEN
NOTARY PUBLIC • STATE of UTAH
675 EAST 500 SOUTH #500
SALT LAKE CITY, UTAH 84102
COMM. EXP. 1-13-02

STATE OF)
: ss
COUNTY OF)

On the _____ day of _____, 19____, personally appeared before me _____, signer of the above instrument, who duly acknowledged to me that _____ executed the same.

Given under my hand and seal this _____ day of _____, 19___.

My Commission Expires: _____
Notary Public, residing at: _____

STATE OF UTAH)
) ss
COUNTY OF Sanpete)

On the 18 day of April, ~~19~~ 2000, personally appeared before me Bryce Wiles, who being duly sworn did say that he is an officer of _____ and that said instrument was signed in behalf of said corporation by resolution of its Board of Directors, and said _____ acknowledged to me that said corporation executed the same.

Given under my hand and seal this 18 day of April, ~~19~~ 2000.

_____
Notary Public, residing at:

My Commission Expires: 3/15/2002

JUAN L LARSON
Notary Public
State of Utah
My Comm. Expires Mar 15, 2002
60 South Main PO Box 820 Gunnison UT 84634

II Rule R647-4-105 Maps, Drawings & Photograph.

105.1 Base Map

A complete and correct topographic base map (or maps) with appropriate contour intervals must be submitted with this notice showing \all of the items on the following checklist. The scale should be approximately 1 inch = 2000 feet (preferably a USGS 7.5 minute series or equivalent topographic map where available). The maps(s) must show the location of lands to be affected in sufficient detail to allow measurement of the proposed area of surface disturbance.

Base Map Checklist

Please check off each section to verify these features are included on the map(s) or explain why it is not applicable. Please add the map identification name or number, which shows these features.

Checklist

Yes (a) Property boundaries of surface ownership of all lands, which are to be affected by the mining operations.

Reference above permit No. for location of operations site.

Reference map attachment: Fayette Quarry Location

Yes (b) Perennial, intermittent, or ephemeral streams, springs and other bodies of water; roads, buildings, landing strips, electrical transmission lines, water wells, oil and gas pipelines, exiting wells or boreholes, or other existing surface or subsurface facilities within 500 feet of the proposed mining operations;

There are no stream, springs, or other bodies of water or wells on the operations site. There is an access road from I-28 on the East Side of the highway leading to Section 32 via Section 31. There is an underground pipeline and overhead electrical transmission lines on the East Side of I-28 in Section 31. These facilities are more than 500 feet from the operations site. Reference Fayette Quarry Location Map attachment.

Yes (c) Proposed route of access to the mining operations from nearest publicly maintained highway (Map scale appropriate to show access);

The Operator uses a pre-existing access road to Section 32 where the operations site is located.

Yes (d) Known areas, which have been previously impacted by mining or exploration activities within the proposed land, affected;

There is one previously impacted area of approximately 1.3 acres, in Section 32, that was left impacted when Mr. Haas, secured the above permit and lease. Mr. Haas reclaimed this area via an informal agreement in order to obtain the above permit.

Yes (e) Areas proposed to be disturbed or reclaimed over the life of the project or other suitable time period.

Reference Surface Facilities Map in Section 105.2, for areas proposed to be disturbed, and concurrently reclaimed over the life of the lease (3 years). The entire site of operations will be disturbed. This map shows current operations sites, plus areas under reclamation.

has back-filled and graded this area. The area lacks seeding. Mr. Haas feels that the State of Utah should provide for seeding this area.

Yes (d) Highwalls which are proposed to remain steeper than 45 degrees and slopes which are proposed to remain steeper than 3 horizontal to 1 vertical.

There are currently no highwalls or slopes steeper than 45 degrees, nor are there any slopes that exceed a 3:1 pitch. The operations plan does not call for the creation of highwalls or steep slopes.

Note: Areas included in section c & d will need to be referenced in the variance request section. Please shade or color-code these areas on this map. Additional maps and cross sections may be required in accordance with Rule R647-4-105.3. Design drawings and typical cross sections for each tailings pond, sediment pond, or other major drainage control structures must also be included.

II Rule R647-4-105 Maps, Drawings & Photograph.

105.2 Surface Facilities Map

Surface Facilities Map Checklist

Please check off each section to verify these features are included on the map(s) or explain why it is not applicable. Please add the map identification name or number, which shows these features.

Yes (a) Proposed surface facilities, including but not limited to: buildings, stationary mining / processing equipment, roads, utilities, power lines, proposed drainage control structures, and the location of topsoil storage areas, overburden / waste dumps, tailings or processed waste facilities, deposal areas for overburden, solid and liquid wastes, and wastewater discharge treatment and containment facilities.

Reference the attached Surface Facilities Map. The operation does not include any tailings, waste dumps, processed waste facilities, or any other liquid wastes. The operation is a surface operation, or quarry pit.

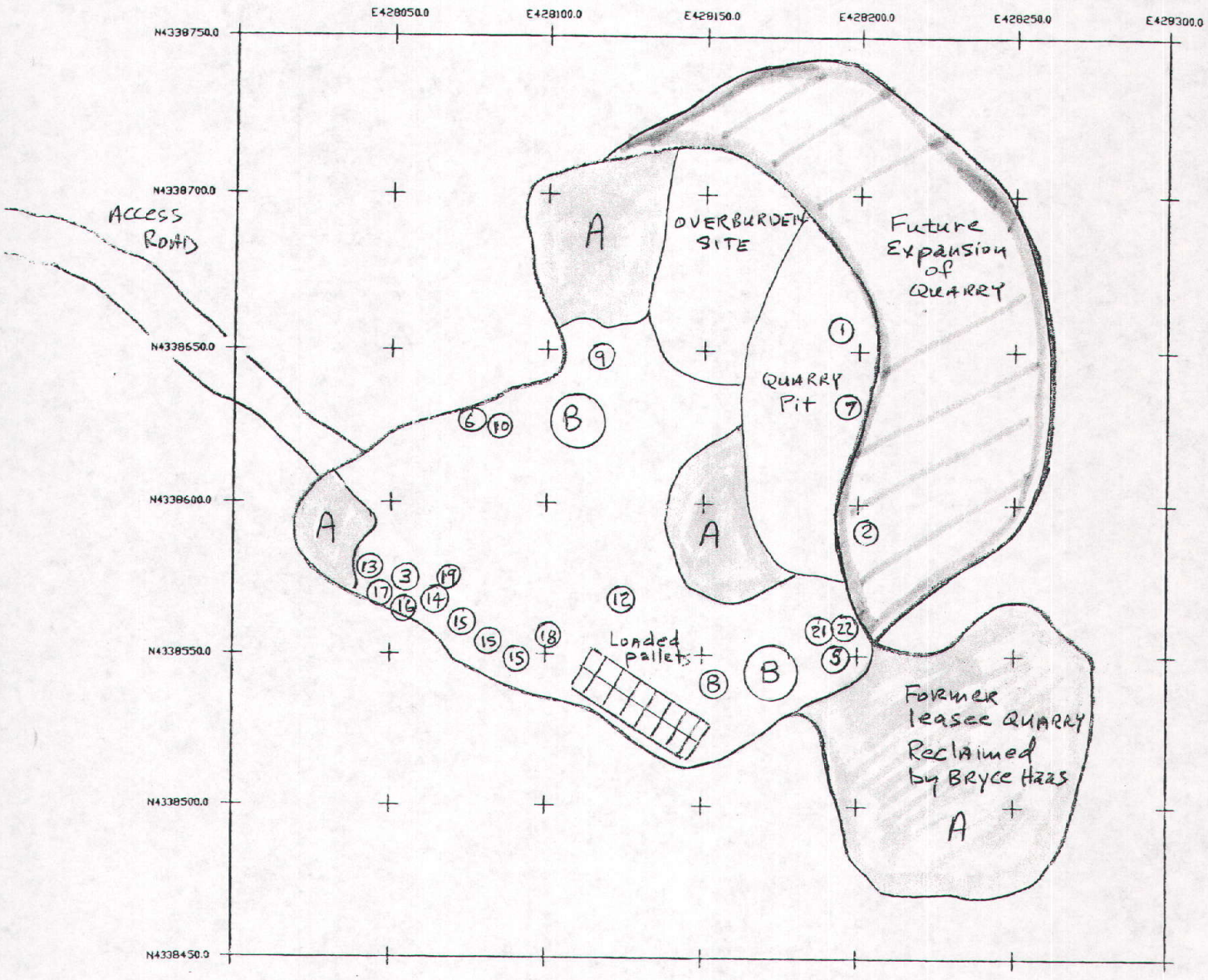
Yes (b) A border clearly outlining the extent of the surface areas proposed to be affected by mining operations, and the number of acres proposed to be affected;

The above referenced map includes the current and future expansion areas. Total acreage is anticipated to be approximately 8 acres during the current life of the permit.

Yes (c) The location of known test borings, pits, or core holes.

The Operator is not aware of any pre-existing borings, or core holes. There was a pre-existing quarry pit of about 1.3 acres adjacent to the current site of operations. This area has been reclaimed by Mr. Haas, and is waiting to be seeded.

Surface Facilities Map
Fayette Quarry
Permit ML 48313-MP



Grid coordinates & areas are approximated
From sketch received through
State of Utah Division O, G & M

A Areas of under reclamation
B Rock staging area

N

0 250
FEET

Equipment possibly used on site:

1	Excavator
2	Dozer
3	Water truck
4	Welding truck
5	2-1/2 ton dump truck
6	1 ton dump truck
7	10-wheel dump truck
8	Front-end loaders
9	Guillotine / hydraulic power plant
10	Rock tumbler
11	Mobile air compressor
12	Semi tractor / trailer
13	Various utility trailers
14	Movable storage sheds / spare parts / tools, etc.
15	Fuel tanks with protective baffles / aprons
16	Oil recovery barrels
17	Trash facilities
18	Portable toilet facilities
19	First aid supplies / fire extinguisher
20	Pickup trucks
21	Cellular telephone
22	RV living quarters

II Rule R647-4-105 Maps, Drawings & Photograph.

105.3 Additional Maps

Reclamation Treatments Map Checklist

Please check off each section to verify these features are included on the map(s) or explain why it is not applicable. Please add the map identification name or number, which shows these features.

Checklist

Yes (a) Areas of the site to receive various reclamation treatments shaded crosshatched or color-coded to identify which reclamation treatments will be applied. Areas would include: buildings, stationary mining / processing equipment, roads, utilities, proposed drainage improvements or reconstruction, and sediment control structures, topsoil storage areas, waste dumps, tailings or processed waste facilities, disposal areas for overburden, solid and liquid wastes, ponds, and wastewater discharge, treatment and containment facilities. Reclamation treatments may include ripping, regrading, replacing soil, fertilizing, mulching, broadcast seeding, drill seeding, and hydroseeding;

Reference attached sketch provided to Mr. Haas, from Lynn Kunzler, depicting the areas that the Division of Oil, Gas, and Mining want reclamated. This map shows areas to be seeded and fertilized, as well as areas of grading to various slope ratios.

Yes (b) A border clearly outlining the extent of the area to be reclaimed after mining, the number of acres disturbed, and the number of acres proposed for reclamation.

The attached sketch referenced above depicts total areas that may experience disturbance, with suggested reclamation treatments. Approximately 8 acres are involved. All acreage will receive some form of reclamation.

Yes (c) Areas disturbed by this operation, which are included in a request for a variance form the reclamation standards.

1. ***A variance is requested for reclamation of pre-existing access roads in Section 31 leading and including Section 32 where the operation site is located.***

2. ***A variance is requested for the approximately 1.3 acres of a pre-existing quarry site noted on attacthced map. Mr. Haas***

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

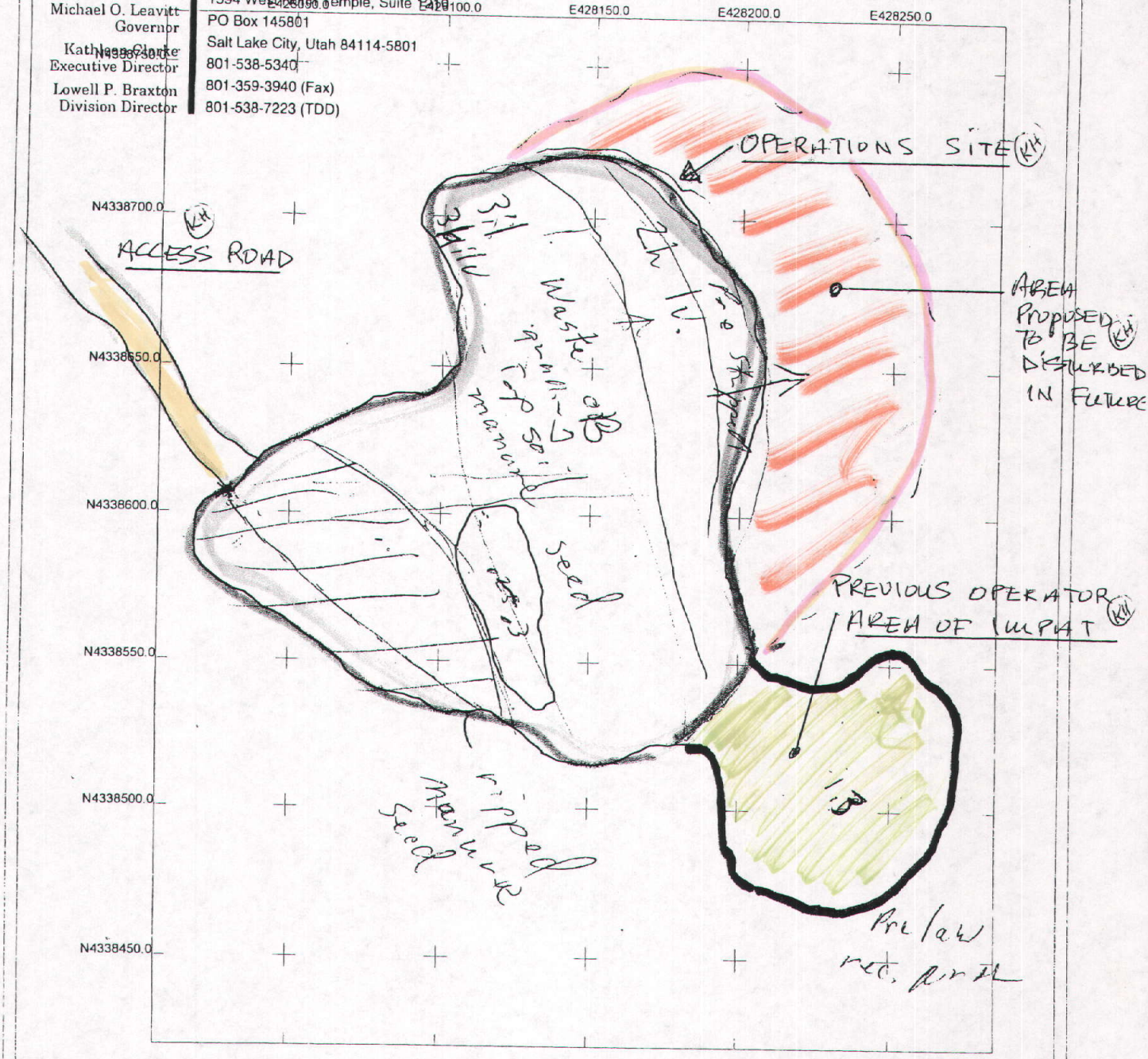
Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

Reclamation Treatments Map (KH)



* (KH) Additions to original map, added by Kit Haas

Universal Transverse Mercator
12 North
WGS 1984

N

Scale 1:2000

0 250.0

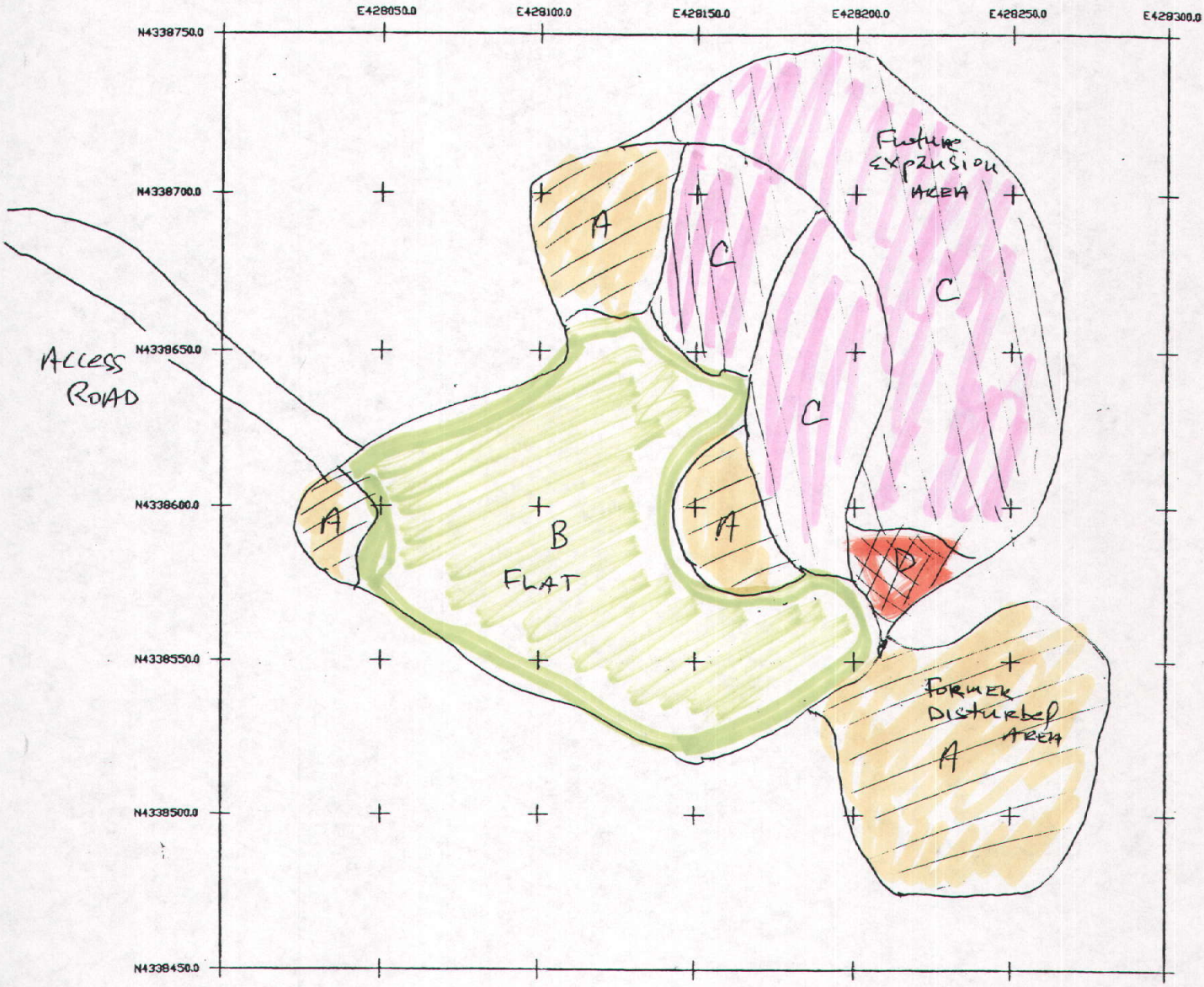
Feet

r041220a.cor
05/01/2000
Pathfinder Office

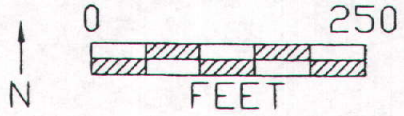
Trimble

5-20 1-6 7-11

Reclamation Treatments Map



A	Areas currently under reclamation. These areas have been back filled with overburden / fines material, re-soiled, and will be seeded.
B	Flat, staging area. This area will be ripped, graded raked, then seeded.
C	These areas, after excavation, will be back-filled with overburden material / fines materials, graded to acceptable slopes of less than 3:1 pitch. The goal of the operator, will be to maintain original contours, less material removed (7-20 feet). Reclaimed soils at depths of 1-2 feet will be applied, raked, then seeded. Note: Some of these areas may be left with surface fines / overburden materials, depending on final examination by State of Utah representatives.
D	This area contains a temporary stockpile of reclaimed topsoil currently used in on-going reclamation efforts.



Pipeline (underground)

Powerlines (overhead)

Access Road

Quarry operations site
quarry side of Road (28) is fenced

Fayette Quarry Location
Permit No. ML 48313-MP

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

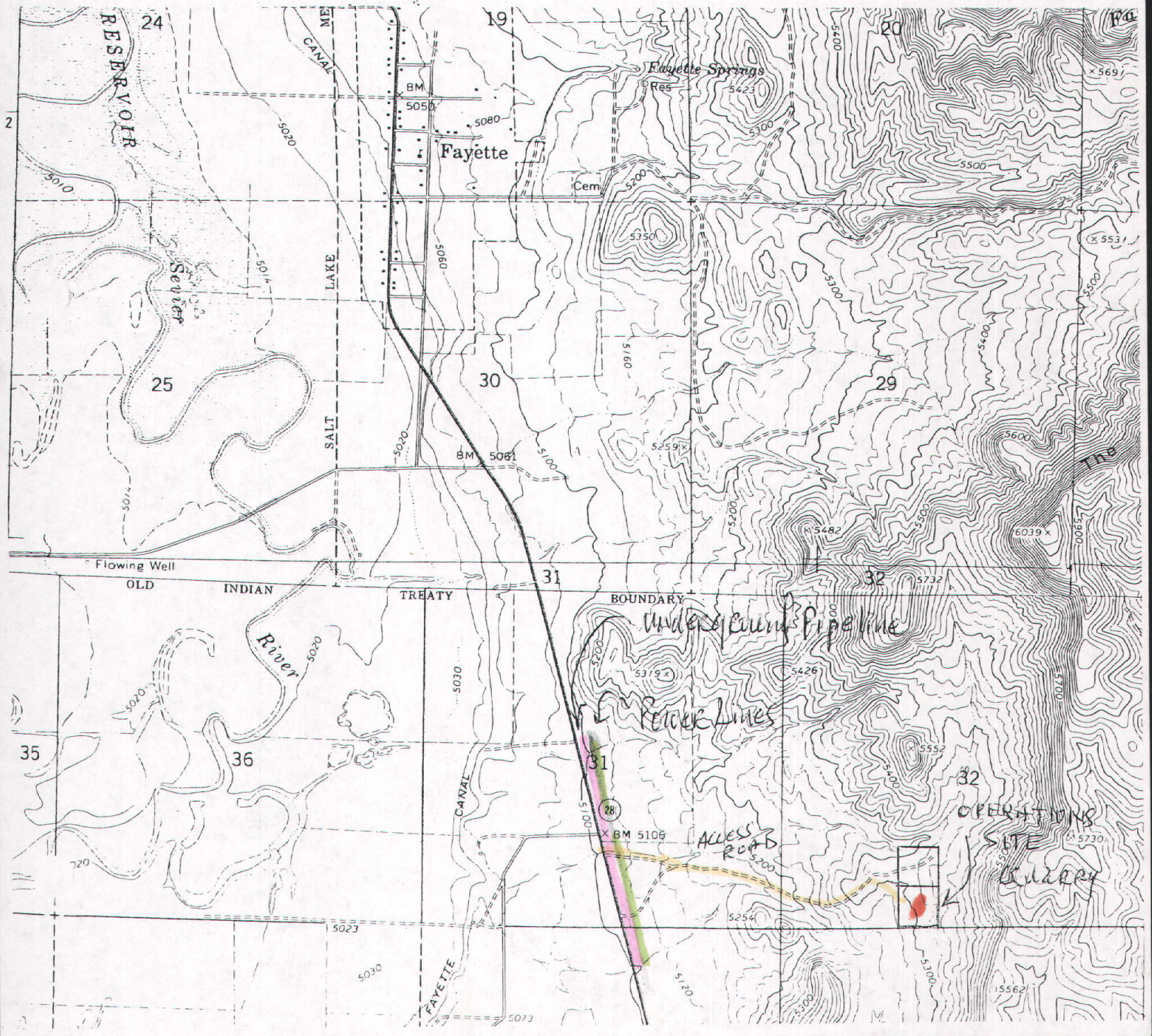
GUNNISON QUADRANGLE
UTAH – SANPETE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:24 000

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



State of Utah

DEPARTMENT OF NATURAL RESOURCES
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PO Box 145801
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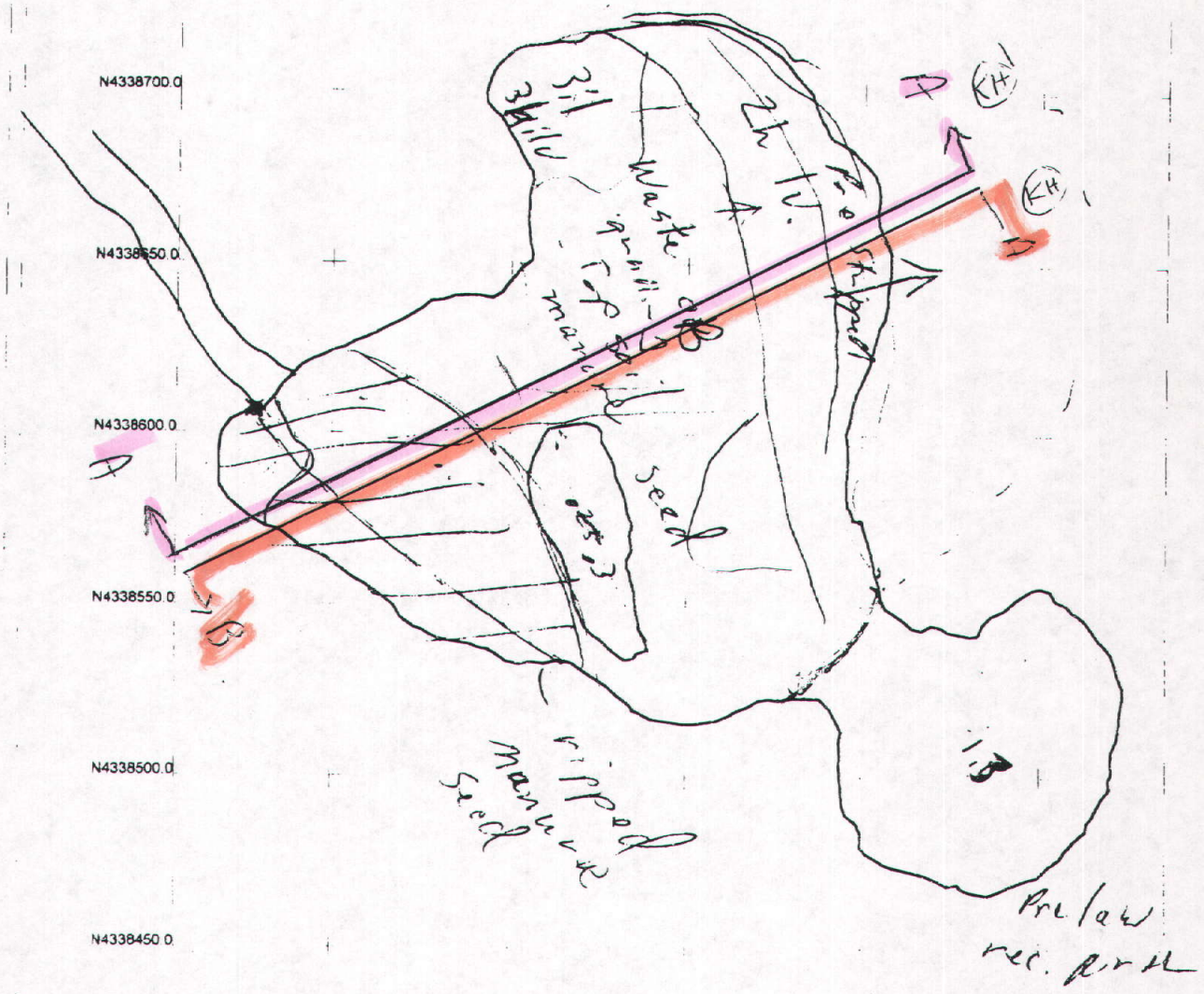
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

Area of Operations Map (KH)



See Section A-A', next page (KH)

See Section B-B', next page (KH)

* (KH) Additions to original map by Kit Haas

Universal Transverse Mercator
12 North
WGS 1984

N

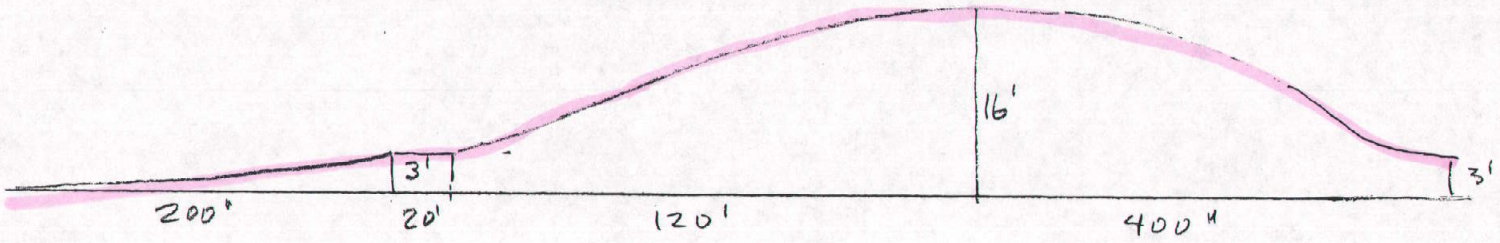
Scale 1:2000

0 250.0

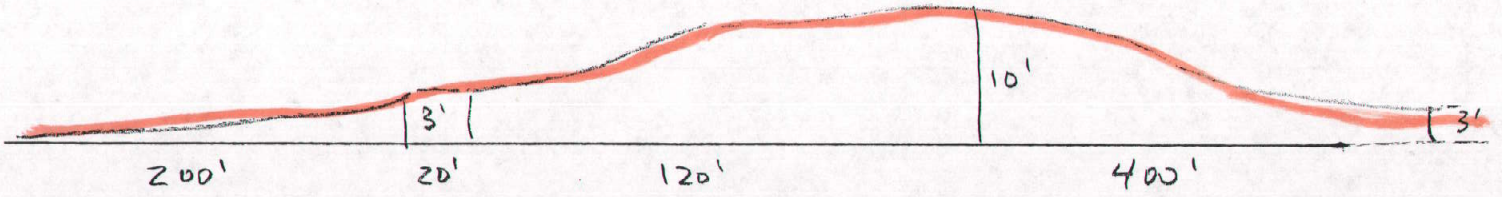
Feet

r041220a.cor
05/01/2000
Pathfinder Office
Trimble

Elevation Map
(Taken from Area of Operations Map)



SECTION A-A



SECTION B-C

III Rule R647-4-106 Operations Plan

106.1 Minerals to be Mined

Limestone is the only type of rock quarried on site.

III Rule R647-4-106 Operations Plan (continued)

106.2 Type of Operation Conducted

Describe the typical methods and procedures to be used in mining operations, on-site processing and concurrent reclamation. Include equipment descriptions where appropriate.

Typical methods used:
In the quarry, approximately 12 feet of overburden is removed to expose limestone seams. Once limestone is exposed, seams are removed by an excavator and loaded into a 10-wheel dump truck. In turn, the dump truck conveys the limestone slabs to another area within the quarry for sorting and further processing. At times rock needs to be "plugged and feathered" to get it into a manageable size. Processing may include a guillotine operation for cutting the rock into building stone, a hand splitting operation used to produce landscape rock, and a tumbling operation for smoothing rock. Once limestone is fully processed, and palletized, it is inventoried for shipment.

Reference "Surface Facilities Map" in Section R647-4-105.2 for a list of equipment used on site.

Concurrent reclamation:
Overburden is removed and located at the rear of the operation. As soon as significant amounts of limestone are removed, and a hole develops, the overburden is back filled into these locations with a dozer. Topsoil / fine material, that has been separated from the operation is used to cover the overburden. Finally, reclaimed areas are seeded during the appropriate seasons of the year. Reclamation is concurrent with the quarrying operation, therefore, any topsoil / fine material, is back-filled almost immediately.

III Rule R647-4-106 Operations Plan (continued)

106.3 –Estimated Acreage

Acreage listed here should match areas measured off the maps provide.

Areas of actual mining:	***1.5 acres***
Overburden / waste dumps:	***1 acre concurrent with above***
Ore and products stockpiles:	***1 acre***
Access / haul roads:	***Section 31 is access to section 32 quarry***
Associated on-site processing facilities:	***1 acre***
Tailings disposal:	***Does not apply***
Other – Please describe	***3.5 acres for future expansion***
TOTAL ESTIMATED ACREAGE	***8 acres***

Note: The above estimate does not include the approximately 1.3 prior area of impact.

III Rule R647-4-106 Operations Plan (continued)

106.5 Existing soil types, location of plant growth material

Specific information on existing soils to be disturbed by mining will be required. General soils information may not be sufficient.

Provide specific descriptions of the existing soil resources found in the area. Soil types should be identified along with depth an extent, especially those to be directly impacted by mining.

Soils – The plan shall include an order 3 Soil Survey (or similar) and map. This information is needed to determine which soils are suitable for stockpiling for revegetation. This soil data may be available from the local Soil conservation Service office, or if on public lands, from the land management agency. The map needs to be of such scale that soil types can be accurately determined on the ground (see Attachment I).

(a) Each soil type to be disturbed needs to be field analyzed for the following:

Depth of soil material:
Volume (for stockpiling):
Texture (field determination)
PH (field determination)
(Cross reference with item 106.6)

(b) Where there are problem soils areas (as determined from the field examination) laboratory analysis may be necessary. Soil samples to be sent to the laboratory for analysis need to be about one quart in size, properly labeled, and in plastic bags. Each of the soil horizons on some sites may need to be sampled. Soil sample locations need to be shown on the soils map. Soil analysis for these samples should include: texture, pH, Ec (conductivity), CED (Catoin Exchange Capacity), SAR (waved by L.K.), % Organic Matter, Total N, Available Phosphorus (as P2O5), Potassium (as K2O), and acid based potential (waved by L.K).

Soil samples are being submitted, June 26, 2000, to the Utah State University lab, located in Logan Utah. Results will be forwarded to the Division of Oil, Gas, and Mining, when they are completed.

III Rule R647-4-106 Operations Plan (continued)

106.4 Nature of Material including waste rock/overburden and estimated tonnage

Describe the typical annual amount of the ore and waste rock / overburden to be generated, in cubic yards.

Where does the waste material originate?

The overburden originates from the top 12 feet of the quarry. This material is not suited for building stone, as it will not pass "Freeze-Thaw" tests.

What is the nature of the overburden / wastes (general chemistry/mineralogy and description of geologic origin)?

The overburden is water damaged from centuries of exposure and is limestone.

Will it be in the form of fines or coarse material?

The overburden come is both fines and coarse configurations.

What are the typical particle size and size fraction of the waste rock?

Thickness of overburden:	***12 to 20 feet***
Thickness of mineral deposit:	***7 feet***
Estimated annual volume of overburden:	***40,000 cubic yards***
Estimated annual volume of tailings/reject materials:	***Does not apply***
Estimated annual volume of ore mined:	***500 cubic yards***
Overburden/waste description:	***Broken rock and fine mat.***

III Rule R647-4-106 Operations Plan (continued)

106.6 – Plan for protecting and redepositing existing soils

Thickness of soil material to be salvaged and stockpiled:

Approximately 4 inches of soil material is removed and stockpiled in area noted on attached map.

Areas from which soil material can be salvaged: (show on map)

Reference above map. All areas within the operations that produce soils are salvaged.

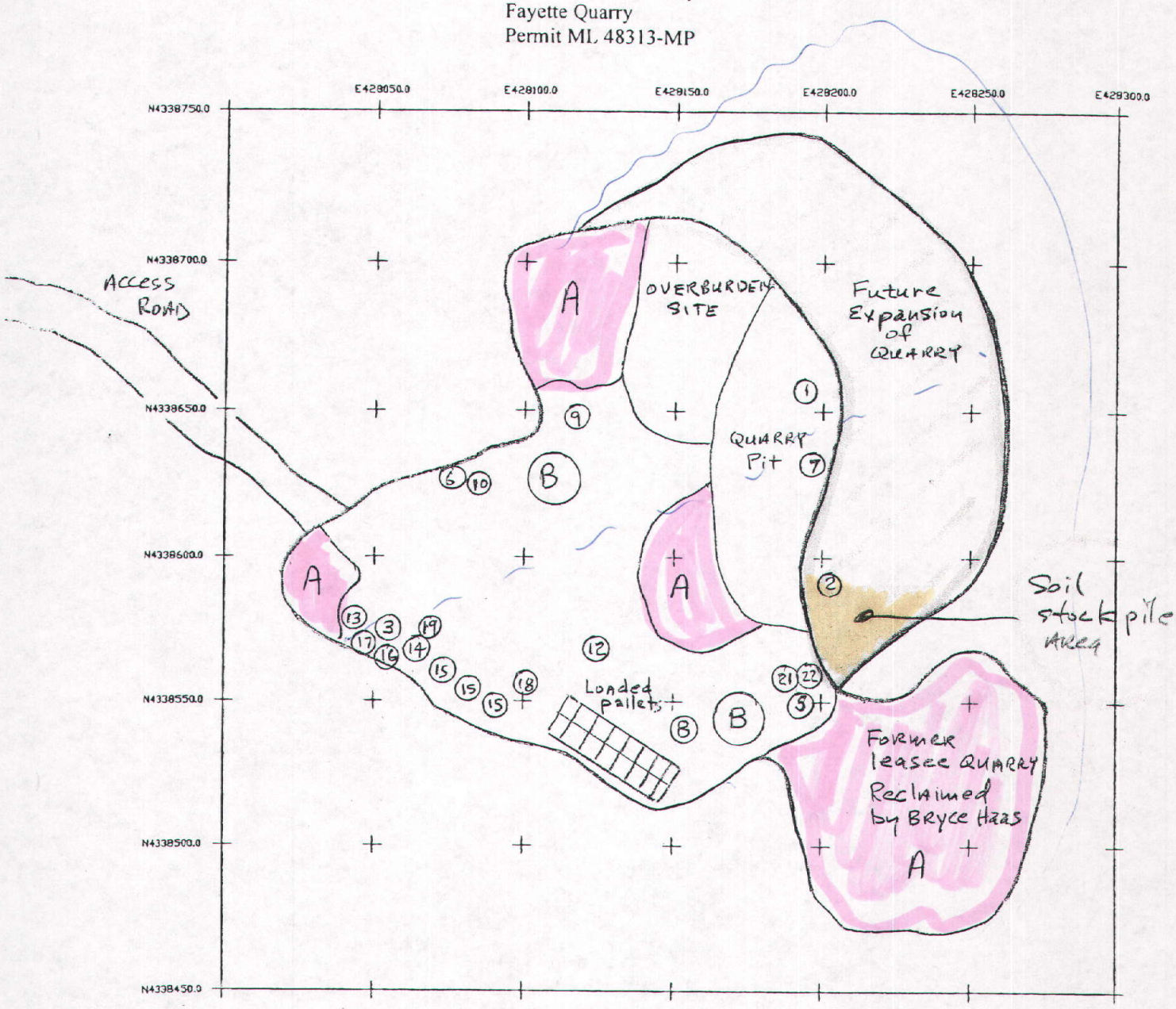
Volume of soil to be stockpiled:

As reclamation is concurrent, the volume usually is approximately 50 cu. yards.

Describe how topsoil or subsoil material will be removed, stockpiled and protected.

A dozer and front-end loader is used to remove topsoil / subsoil and moved to the site noted on the attached map, for storage. The above soils are concurrently being transferred daily to sites of reclamation noted on the attached map in areas "A".

Surface Facilities Map
Fayette Quarry
Permit ML 48313-MP



Grid coordinates & areas are approximated
From sketch received through
State of Utah Division O, G & M

A Areas of under reclamation
B Rock staging area

N

0 250
FEET

Equipment possibly used on site:

1	Excavator
2	Dozer
3	Water truck
4	Welding truck
5	2-1/2 ton dump truck
6	1 ton dump truck
7	10-wheel dump truck
8	Front-end loaders
9	Guillotine / hydraulic power plant
10	Rock tumbler
11	Mobile air compressor
12	Semi tractor / trailer
13	Various utility trailers
14	Movable storage sheds / spare parts / tools, etc.
15	Fuel tanks with protective baffles / aprons
16	Oil recovery barrels
17	Trash facilities
18	Portable toilet facilities
19	First aid supplies / fire extinguisher
20	Pickup trucks
21	Cellular telephone
22	RV living quarters

III Rule R647-4-106 Operations Plan (continued)

106.7 – Existing vegetative communities to establish revegetation success

Vegetation – The operator is required to return the land to a useful condition and reestablish at least 70 percent of the premining vegetation ground cover.

Provide the Division with a description of the plant communities growing onsite and the percentage vegetation cover for each plant community located on the site. Describe the methodology used to obtain these values.

The percent ground cover is determined by sampling the vegetation type(s) on the areas to be mined (see attachment I for suggested sampling methods).

(a) Vegetation Survey – The following information needs to be completed based upon the vegetation survey.

Sampling method used:
Number of plots or transects used (10 minimum):

Ground Cover	Percent
Vegetation (perennial grass, forb and shrub cover.	
Litter	
Rock / rock fragments	
Bare ground	
	100%
Revegetation Requirement	70% (at least)

Indicate the vegetation community(ies) found at the site.

List the predominant perennial species of vegetation growing in each vegetation community type.

(b) Photographs – The operator may submit photographs (prints) of the site to show existing vegetation conditions. These photographs should show the general appearance and condition of the area to be affected and may be utilized for comparison upon reclamation of the site. Photographs should be clearly marked as to the location, orientation and the date they were taken.

Reference the attached survey provided by Willow Creek Seed.

Attachment I

Vegetation Cover Sampling

Vegetation cover sampling determines the amount of ground that is covered by live vegetation. It is divided into four categories, which equal 100 percent. They are:

Vegetation: This is the live perennial vegetation. Care should be taken to avoid sampling in disturbed areas that have a large percentage of annual or weedy vegetation, such as Cheatgrass and Russian Thistle.

Litter: This is the dead vegetation on the ground, such as leaf and stem litter.

Rock / rock fragments: This is the rock and rock fragments on the soil surface.

Bare ground: This is the bare soil, which is exposed to wind and water erosion.

Cover Sampling - The following methods are acceptable:

Ocular Estimation

This method visually estimates the percentage of ground covered in a plot by the four components. Plot size is usually a meter or yard square or a circular plot 36 inches in diameter. Ten to twenty plots should be randomly sampled in each major vegetation type.

Line Intercept

Percent ground cover is obtained by stretching a tape measure (usually 100 feet) over the ground and then recording which of the four components is under each foot mark. At least 10 of these transects should be randomly laid out and measured in each major vegetation type.

Soil Survey and Sampling Methods

If a SCS or land management agency soil survey is not available, the operator shall delineate all soil types that will be disturbed by mining on a map. Each soil type shall be sampled for its characteristics and inherent properties. Representative sampling locations should have similar geologic parent material, slopes, vegetative communities and aspects. The sampling locations should be representative of the soil type; and be identified on the map. Sampling shall be at a minimum of one for each soil type disturbed.

The soil map needs to be of sufficient scale so that each soil type can be accurately located on the ground.

Bryce,

Enclosed are two coppies of the vegetative analysis. If you need any other coppies with my signature on them please feel free to cll, write, or e-mail me. When you are ready to revegetate your quarry, please consider us as a resource. When revegetating an area I usually do not charge for the consultations, but would charge for the seed and labor for the planting. I believe that your site could be revegetated without much problem. I appreciate your business. Please feel free to call me anytime at one of the numbers listed below.

Sincerely, Allan R. Stevens PhD.

Willow Creek Seed
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C & B Limestone Quarry, Fayette - Vegetative Analysis

May 22, 2000

There are two distinct vegetation types on the C & B quarry site: 1) the area on the hill where the quarry is located and where the expansion of the quarry will take place is primarily a black sagebrush community 2) on the West side of the parking area in the valley between the hills is a salt desert shrub community. Twenty 100' line transects were taken in the black sagebrush community, and four 100' line transects were taken in the salt desert shrub community. All transects were randomly located using a random number table. Data was collected using the line intercept method on May 18, 2000. The number of transects taken in each community was determined by the total area of the community. Each individual plant species was identified. Live cover was determined for each species. Results are presented below. Species are listed in three life form categories (grasses, forbs, trees and shrubs).

BLACK SAGEBRUSH COMMUNITY, LIVE COVER

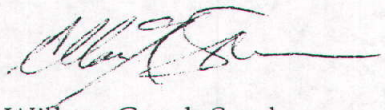
Common Name	Scientific Name	% Live Cover
Trees and Shrubs		***25***
Black Sagebrush	*Artemisia nova*	20
Shadscale	*Atriplex confertifolia*	2
Thorny Horsebrush	*Tetradymia spinosa*	1.5
Low Rabbitbrush	*Chrysothamnus viscidiflorus*	1
Nevada Ephedra	*Ephedra nevadensis*	<0.5
Common Pricklypear	*Opuntia erinacea*	<0.5
Utah Juniper	*Juniperus osteosperma*	<0.5
Forbs		***<0.5***
Globemallow	*Sphaeralcea coccinea*	<0.5
Buckwheat	*Eriogonum spp.*	<0.5
Bur Buttercup	*Ranunculus testiculatus*	<0.5
Grasses		***1***
Indian Ricegrass	*Oryzopsis hymenoides*	0.5
Squirreltail	*Sitanion hystrix*	0.5
Sandberg's Bluegrass	*Poa secunda*	<0.5
Cheatgrass	*Bromus tectorum*	<0.5
Total		***26***

SALT DESERT SHRUB COMMUNITY, LIVE COVER

Common Name	Scientific Name	% Live Cover
Trees and Shrubs		***20.5***
Carpet Phlox	*Phlox hoodii*	12
Sharp Slenderlobe	*Leptodactylon pungens*	6
Shadscale	*Atriplex confertifolia*	1
Thorny Horsebrush	***Tetradymia spinosa***	**0.5**
Black Sagebrush	*Artemisia nova*	0.5
Low Rabbitbrush	*Chrysothamnus viscidiflorus*	<0.5
Utah Juniper	*Juniperus osteosperma*	<0.5
Forbs		***<0.5***
Bur Buttercup	*Ranunculus testiculatus*	<0.5
Grasses		***7.5***
Indian Ricegrass	*Oryzopsis hymenoides*	7
Squirreltail	*Sitanion hystrix*	0.5
Cheatgrass	*Bromus tectorum*	<0.5
Total		***28***

Bryce also asked me to determine total cover by rock on the hillside where quarry expansion is planed. Anything over 1′ wide was considered rock. Total cover of rock was 31%.

If you have any further questions please feel free to write or call me.



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III Rule R647-4-106 Operations Plan (continued)

106.9 – Location and size of ore and waste stockpiles, tailings and treatment ponds and discharges.

Describe the location and size of any proposed waste / overburden dumps, stockpiles, tailings facilities and water storage or treatment ponds.

There are no waste sites necessary for this operation, therefore, there are none. There is a 50 cu. yard temporary stockpile of topsoil. Reference Section R647-4-106.6 for the location of above.

Describe how overburden material will be removed and stockpiled.

Reference Section R647-4-106.2 for description.

Describe how tailings, waste rock, rejected materials, etc. will be disposed of.

There are no tailings. Waste rock / rejected materials are used during the reclamation process. This material is described as overburden and fines material.

Describe the acreage and capacity of waste dumps, tailings ponds and water storage ponds to be constructed. All impoundments must include the necessary hydrologic calculations to determine if they are adequately sized to handle storm events.

None of the above exist, nor will exist.

Describe any proposed effluent discharge points (UPDES) and show their location on the surface facilities map. Give the proposed discharge rate and expected water quality. Attach chemical analyses of such discharge if available.

Does not apply.

Identify any potentially deleterious materials that may be stored on site (including fuel, oil, processing chemicals, etc.) and describe how they will be handled and stored.

Diesel and gas fuels are on site in appropriate overhead storage containers made for such purposes. Each of the 3 fuel storage containers have protective baffles / apron beneath them capable of holding 150% capacity of each tank. Recycled oils are stored in 55-gallon dumps and are picked up weekly by a recovery service.

Describe the measures taken to salvage and store soils to be used in reclamation.

Reference R647-4-106.7. Reclamation is concurrent.

Describe how stockpiled topsoil will be protected from erosion and further impact.

Reclamation is done on a daily basis. Stockpiled soiled are re-located / transferred daily. The same soil does not remain in the stockpile for any length of period.

Please describe any reclamation to be done during active mining operations prior to final closure. Reference these areas on a map.

Reference "Surface Facilities Map" in Section R647-4-105.2, for this description.

III Rule R647-4-106 Operations Plan (continued)

106.8 – Depth to groundwater, overburden material & geologic setting

Describe the approximate depth to ground water in the vicinity of the operation based on the completion of any monitoring or water wells in the area. Please show the location of these wells on the base map.

There are no water wells on the operations site, nor is there any surface water of any kind.

Depth to groundwater

The quarry operation typically does not exceed 7 feet, once approximately 12 feet of overburden is remove. The site is also located on the crest of a small hill.

Provide a narrative description of the geology of the area and, or a geologic cross section.

Reference US Dept of Interior Geological Survey Map, Gunnison, Utah.

IV R647-4-107 – Operation Practices

During operations, the operator shall conform to the practices listed under this section of the Minerals Rules unless the Division grants a variance in writing.

Describe measures taken to minimize hazards to public safety during mining operations regarding:

The closing or guarding of shafts and tunnels to prevent unauthorized or accidental entry in accordance with MSHA regulations.

This operations site is a surface quarry. There are no known shafts or tunnels on site.

The disposal of trash, scrap metal, wood and extraneous debris.

All of the above materials are hauled off site to public landfills.

The plugging or capping of drill, core or other exploratory holes.

The operator is unaware of such features, and does not plan to do any drilling.

The posting of appropriate warning signs in locations of public access to operations.

The gate leading into the quarry is locked after hours. "No Trespassing" signs are posted at the front gate of the access road leading to quarry operations.

The construction of berms, fences, barriers above highwalls or other excavations.

There are no highwalls on the operations site.

If any of these safety measures are unnecessary, please explain why.

Describe measures taken to avoid or minimized environmental damages to natural drainage channels, which will be affected by this mining operation.

There is no water on the operations site.

Describe measures taken to control and minimize sediment and erosion on areas affected by this mining operation. Describe measures being taken to prevent sediment from leaving the disturbed area.

There are no ponds or water, therefore, there will be no sediment. Reclaimed areas will be rough graded and seeded in order to prevent erosion.

V Rule R647-108 – Hole Plugging Requirements

All drill holes, which will not eventually be consumed by mining, must be plugged according to the methods listed in this section.

Describe the location of any aquifers encountered by drilling and the method to be used to plug such water containing holes.

Describe the method to be used to plugging holes not containing water.

There are no known drill holes on site. The current operations will not require such features.

VI Rule R647-109 – Impact Statement

109.1 Surface and groundwater systems

Describe impacts to surface or groundwater, which could be caused by this mining operation.

Describe how these impacts will be monitored and mitigated.

The appropriate groundwater and stormwater control permits need to be obtained from the Division of Water Quality. Please reference any such permits.

Surface water does not exist at the operations site. The quarry does not have enough depth to disturb underground water tables. The actual depth of groundwater at the site is not known. Reference Section R647-4-106.8 for geological map of the area. After approximately 12 feet of overburden is removed a 7-foot seam of limestone is removed. This is the total depth of operations. No water has appeared within the above 19-20 feet of excavation.

VI Rule R647-4-109 – Impact Statement

109.2 Wildlife habitat and endangered species

Describe the impacts on wildlife habitat associated with this operation.

Describe any impacts to big game species found in the area.

Describe any impacts to riparian areas.

Describe any impacts this operation will have on waterfowl (fly-over, temporary resident or permanent resident).

List any threatened or endangered wildlife species found in the area.

Describe impacts to threatened or endangered species and their habitats.

Describe measures to be taken to minimize or mitigate any impacts to wildlife or endangered species.

Mr. Haas has contacted the Division of Wildlife Resources (by telephone) in Springville, Utah, for this information. A representative by the name of Doug said that the Division does not provide this information, and that a private survey would need to be secured.

****Mr. Haas believes that the Division of Wildlife Resources has access to the required information and requests the Division of Oil, Gas, and Mining to help provide the above information so that SectionR647-4-109.2 may be fulfilled. Mr. Haas does not see the necessity of hiring a private agency for the above information when he feels that the State of Utah must be aware of the wildlife within its borders.***

VI Rule R647-4-109 – Impact Statement

109.3 Existing soil and plant resources

Describe impacts to the existing soil and plant resources in the area to be affected by mining operations.

Reference Section R647-4-106.7 for existing plant resources. Topsoil is removed to exposed limestone. As topsoil is removed in areas that are not covered by barren rock, an impact to both soil and vegetation occurs. These disturbances are reclaimed concurrent with operations.

Describe impacts to riparian or wetland areas, which will be affected by mining.

There are no impacts to any of the above as they do not exist within 2 miles of the operations site.

Describe impacts to threatened or endangered plant species.

The vegetation survey conducted in Section R647-4-106.7, does not list any threatened or endangered plant species.

Describe measures to be taken to minimize or mitigate any impacts to soil and plant resources.

Mr. Haas only disturbs areas needed in the immediate quarry operations. Care is taken to not disturb adjacent areas.

VI Rule R647-4-109 – Impact Statement

109.4 Slope stability, erosion control, air quality, public health & safety

Describe the impacts this mining operation will have on slope stability, erosion, air quality, and public health and safety. Include descriptions of highwall and slope configurations and their stability. Air quality permits from the state Division of Air Quality may be required for mining operations. Please reference any such permits.

Describe measures to be taken to minimize or mitigate impacts to slope stability, erosion, air quality, or public health and safety.

Slope stability is accomplished by rough grading in order to prevent erosion. A water truck is on site to wet dusty areas that occur during operations. Highwalls do not exist nor are planned for future operations.

Public access is denied via "no trespassing" signs posted at the front gate. The front gate is locked after hours. Site personnel wear safety glasses and steel-toed boots as a requirement of employment. Machinery operations and safety are verbally expressed to employees as part of training exercises.

VII Rule R647-4-110 – Reclamation Plan

110.1 Current land use and postmining land use

Concurrent or premining land use(s) other than mining:

The operations site was previously used for grazing animals. The operations site is concurrently used for grazing animals during a few months each year.

List future post-mine land-use(s) proposed:

While much of the original site terrain consists of bare rock and fragments of rock at the surface the operator assumes that grazing animals will continue on areas where foliage is present.

(Develop the reclamation plan to meet proposed post-mined land use.)

VII Rule R647-4-110 – Reclamation Plan

110.2 Reclamation of roads, highwalls, slopes, leach pads, dumps, etc

Describe how the following features will be reclaimed: roads, highwalls, slopes, impoundments, drainages and natural drainage patterns, pits, ponds, dumps, shafts, adits, drill holes and leach pads.

Describe the configuration of these features after final reclamation.

There are no highwalls, impoundments, drainages, ponds, dumps, shafts, adits, drill holes, or leach ponds on site. Quarry pits will be back-filled with fines materials / overburden, graded to less than a 3:1 slope, and covered with reclaimed soil, then seeded.

Describe the rinsing and neutralization of leach pads associated with final decommissioning.

Does not apply. There are no natural water or man-made ponds on site. There are no leach pads, nor will there ever be during the life of this lease.

Describe how roads will be reclaimed. Road reclamation may include: regrading cut and fill sections, ripping the road surface with a dozer, topsoil replacement, construction of water bars, construction of traffic control bergs: or ditches, and reseeding.

Mr. Haas is seeking a variance from reclamation of the access road that leads to the quarry. He feels that it would be an unfair burden placed upon operations if an existing access road had to be reclaimed at the end of the lease. The access road has been and will continue to be used by ranching operations.

Describe how highwalls will be reclaimed. Highwall reclamation may include: drilling and blasting, backfilling, regrading, topsoil replacement, and seeding.

There are currently no highwalls. This operation will not produce highwalls.

Describe how slopes will be reclaimed: Slope reclamation may include: regrading to a 3 horizontal : 1 vertical (3h:1v) configuration, topsoil replacement, contour ripping, pitting, and reseeding.

Slopes will be excavated, and graded with a dozer to be less than or equal to a 3:1 pitch. Fines material / overburden may be used to form a solid base. Reclaimed soil will be applied in depths of at least 1 foot, raked, then seeded.

Describe how impoundments, pits and ponds will be reclaimed. Include the final elevations and final disposition of the drainage in and around the impoundment. If the impoundment, pit, or pond is intended to be left as part of the post-mining land use, then

an agreement with the land managing agency / owner is required. Structures to remain must be left in a stable condition.

The remains of the quarry pit will be such that rainwater will not settle in this area. Natural slopes, minus material removed, will be approximately restored during concurrent reclamation.

Include the final size of the impoundment, pit, or pond in acre-feet of storage and the capacity of the spillway to safely pass storm events.

There are no natural water resources on site, therefore, the above does not apply.

Impoundments, pits, and ponds, which are not approved, as part of the post mining land use shall be reclaimed, free draining, and the natural drainage patterns restored.

There are no natural water resources on site, therefore, the above does not apply.

Describe how drainages will be reclaimed. Drainage reclamation would include the reestablishment of natural drainage patterns witch fit in with the upstream and downstream cross-section of existing drainage in the vicinity of the disturbance. Drainage reclamation would also include the reestablishment of a stable channel in the reclaimed reach of channel, using the necessary armoring to prevent excessive erosion and downstream sedimentation.

There are no natural drainages on site, however, the original contour of the landscape will be maintained, minus the limestone removed. In other words, approximately 12 feet will come off of the original contour plus the additional removal of a 7-foot seam of limestone. The quarry cuts into the side of a small hill. Reclamation efforts maintain a gentle slope.

Include cross-sections and profiles of reestablished channels to demonstrate compatibility with existing drainage characteristics.

There were no natural channels on the operations site. Again, reclamation will maintain the same approximate slope. The hill will just be lower by the amount of material removed. Care will be taken to not create a man-made channel that will encourage erosion.

Describe how waste dumps will be reclaimed. Waste dump reclamation may include regrading to a 3h:1v configuration, topsoil replacement, mulch or biosolids applications, contour ripping or pitting, and reseeding. Characterization of the physical and chemical nature of the waste dump materials should be provided.

Original overburden and fines materials will be placed back in the quarry during concurrent reclamation. The chemical and composition of the site should remain relatively unchanged.

Describe how shafts and adits will be reclaimed. Reclamation of shafts may include backfilling, installation of a metal gate, installation of a reinforced concrete cap, topsoil replacement and reseeding. Reclamation of adits may include: backfilling, installation of block wall, installation of a metal grate, topsoil replacement and reseeding.

There are no shafts or adits on the operations site.

Describe how drill holes will be reclaimed. Drill hole reclamation must be consistent with the rules for plugging drill holes (R647-4-108). Reclamation of plugged drill holes may include topsoil replacement and reseeding.

There are no drill holes on the operations site, nor is drilling planned during the live of the lease.

Describe how tailings areas will be reclaimed. Tailings reclamation may include dewatering, neutralization, placement of cap materials, placement of subsoil materials, topsoil replacement and reseeding. Characterization of the physical and chemical makeup of the tailings material should be provided.

There are no tailings on site, nor will there ever be during this operation.

Describe how leach ponds will be reclaimed. Reclamation of leached materials may include neutralization or leached materials, rinsing of leached materials, dewatering leached materials, regrading slopes of leached materials to 3h:1v, extending pad liners, placement of capping materials, placement of subsoil materials, mulch or biosolids, topsoil replacement and reseeding. Characterization of the physical and chemical makeup of the leached materials should be provided. Post closure monitoring and collection of drain down fluids should also be addressed.

There are no leach ponds on site, nor will there ever be during this operation.

Note: The Minerals Rules require overall Highwall angles of no more than 45 degrees at final reclamation unless a variance is granted. All dump or fill slopes should be left at an angle of 3h:1v or less. Any slopes steeper than 3h:1v must be reclaimed using state-of-the-art surface stabilization technology. Pit benches exceeding 35 feet in width should be topsoiled, or covered with fines, and revegetation.

<u>Note:</u> Refer to the "Reclamation Map" attached. Areas that originally had vegetation will be re-seeded. Areas were the surface was basically rock will be back filled with original material only in the form of overburden and fines material.

VII Rule R647-4-110 – Reclamation Plan

110.3 Surface facilities to be left

Describe any surface facilities, which are proposed to remain on-site after reclamation (buildings, utilities, roads, drainage structures, impoundments, etc.).

The pre-existing access road will remain.

Describe their post-mine application. *Justification for not reclaiming these facilities must be included in the variance request section.*

A variance has been requested for the access road under Section R647-4-105.3. Post mining applications will include grazing usage. Grazing was also a pre-existing condition.

VII Rule R647-4-110 – Reclamation Plan

110.4 Treatment, location and disposition of deleterious materials.

Describe the nature and extend of any deleterious or acid forming materials located on-site.

The operation does not chemically change the nature of the original materials.

Describe how these materials will be neutralized, removed, or disposed of on site.

Does not apply.

Describe how buildings, foundations, trash and other waste materials will be disposed of.

There are no permanent structures on site. All temporary structures, such as fuel tanks, storage sheds, etc. will be removed when the quarry operation closes.

VII Rule R647-4-110 – Reclamation Plan

110.5 Revegetation planting program and topsoil redistribution

Describe the vegetation tasks to be performed in detail. For example, will ripping, mulching, fertilizing, seeding and scarifying of these areas be performed and if so, how will this be accomplished? Correlate this information with the Reclamation Treatments Map.

(a) Soil Material Replacement

In order to reestablish the required ground cover, one to two feet (depending on underlying material) of suitable soil material usually has to be redistributed on the areas to be reseeded. If the stockpiled soil isn't sufficient for this, soil borrow areas will need to be located.

Describe the volume of soils and approximated depth of soil cover to be used in reclamation.

Describe the source of these soils and provide an agronomic analysis of the soils. If soils will not be used describe the alternative material or amendments to be applied in lieu of soils.

Soil analysis is in process at the time of this application and will be forwarded when received from Utah State University.

Describe the methods used to transport and place soils.

Original soils will be transferred from a temporary stockpile to reclamation areas. Areas that were predominately covered with surface rock will be covered with "fines materials, left over from quarry operations. Soil borrow areas have not been used, and will be avoided. Currently, and for the foreseeable future, original soils will be available for reclamation work.

(b) Seed Bed Preparation

Describe how the seedbed will be prepared and equipment to be used. The Division recommends ripping or discing to a minimum of 12 inches and leaving the seedbed surface in as roughened condition as possible to enhance water harvesting, erosion control and revegetation success. Compacted surfaces such as roads and pads should be deep ripped a minimum of 18 inches.

Pads will be ripped 18 inches, fertilized, then seeded. Mr. Haas is seeking a variance for pre-access road reclamation.

(c) Seed Mixture – List the species to be seeded

Provide a seed mix listing adaptable plant species and the rate of seeding that will be used at the site for reclamation. More than one seed mix may be needed, depending upon the areas to be reclaimed. Keep the proposed post-mining land use in mind when developing seed mixes.

Example

Species Name	Common Name	Seeding Rate (Lbs. pure live seed / acre)

The Division recommends seeding 12-15 Lbs. / acre of native and introduced adaptable species of grass, forb, and browse seed for drill seeding and 15-20 Lbs. / acre for broadcast or hydro seeding. The Division can provide assistance in developing reclamation seed mixes if requested.

(d) Seeding Method

Describe method of planting the seed. The Division recommends planting the seed with a rangeland or farm drill. If broadcast seeding, harrow or rake the seed ¼ to ½ inch into the soil. Fall is the preferred time to seed.

(e) Fertilization

Describe fertilization method, type(s) and application rate (if required).

(f) Other Revegetation Procedures

Please describe other reclamation procedures, such as mulching, biosolids application, irrigation, hydroseeding, etc. that may be planned.

Reference Vegetation Report contained in Section 647-4-106.7. The cost to re-vegetate the operations site was quoted at approximately $400 per acre. Willow Creek Seed has assured Mr. Haas, that replanting the original species would not be a difficult task. While the task of re-seeding will be left to professionals. Under their consultation and direction, Mr. Haas may assist in harrowing, raking, or spreading manure. Willow Creek Seed will determine the application rates of fertilizer, broadcasting methods, and methods of harrowing.

VIII Rule R647-4-112 Variance

The operator may request a variance from Rules R647-4-107 (Operations Practices), R647-4-108 (Hole Plugging), and R647-4-11 (Reclamation Practices) by submitting the following information:

1.11 The rule(s) which a variance is requested from (rule number and content).

1.12 A description of the specific variance requested and a description of the area affected by the variance request; show this area on the Reclamation Treatments Map(s).

1.13 Justification for the variance.

1.14 Alternate methods or measures to be utilized in the variance area.

Variance requests are considered on a sit-specific basis. For each variance requested, attach a narrative, which addresses the four items listed above.

Reference Section R647-4-105.3 Reclamation Treatments Map Checklist "c".

"Areas disturbed by this operation, which are included in a request for a variance from the reclamation standards."

1. ***A variance is requested from reclaiming the pre-existing access road in Section 31 leading to and including the same access road in Section 32 where the operation site is located. It is proposed that the access road remain a feature of the landscape, as ranching operations are concurrent with quarry operations.***

2. ***A variance is requested for the approximately 1.3 acres of a pre-existing quarry site adjacent to the current operations site. Mr. Haas has not used this area; however, he has back-filled and graded this area. The area lacks seeding. As this was a pre-existing condition, Mr. Haas feels that the State of Utah should seed the above area. While the previous tenant should have reclaimed the above section, Mr. Haas feels that the State of Utah should share in this burden.***

IX Rule R647-4-113 Surety

A reclamation surety must be provided to the Division prior to final approval of this application. In calculating this amount, include the following major tasks:

(1) Clean-up and removal of structures
(2) Backfilling, grading and contouring
(3) Soil material redistribution and stabilization
(4) Revegetation (preparation, seeding, mulching)
(5) Safety gates, berms, barriers, signs, etc.
(6) Demolition, removal or burial of facilities / structures, regrading / ripping of facilities areas
(7) Regrading, ripping of waste dump tops and slopes
(8) Regrading / ripping stockpiles, pads and other compacted areas
(9) Ripping pit floors and access roads
(10) Drainage reconstruction
(11) Mulching, fertilizing and seeding the affected areas
(12) General site clean up and removal of trash and debris
(13) Removal / disposal of hazardous materials
(14) Equipment mobilization
(15) Supervision during reclamation

To assist the Division in determining a reasonable surety amount, please attach reclamation cost estimate, which addresses each of the above steps. The areas and treatments include in the reclamation treatments map should correspond with the items included in the reclamation cost estimate. The reclamation costs use by the Division must be third party.

A surety of $5,000 was posted for reclamation with the State of Utah School and Institutional Trust Lands Administration, in order to secure the Mineral Commodity Materials Permit # 48313-MP. Contact Mr. John Blake (SITLA) for a copy of the above surety.

X Permit fee (Mined Land Reclamation Act 40-8-7(i)

The Utah Mined Land Reclamation Act of 1975 [40-8-7I] provides the authority for the assessment of permitting fees. Commencing with the 1998 fiscal year (July 1 – June 30), annual permit fees are assessed to new and existing notices of intention.

Large mining permits require an initial submission fee and annual fee of $350.00 for surface disturbance of 50 or less acres. Or a $750.00 fee for surface disturbance greater than 50 acres (see page five Section III, rule R647-4-106.3 for estimated disturbance calculation). The appropriate fee MUST accompany this application.

PLEASE NOTE: If you are expanding from a small mining operation to a large mining operation, the appropriate large mine permit fee, less the annual $100.00 small mine fee (if already paid) MUST accompany this application.

XI Signature Requirement

I hereby certify that the foregoing is true and correct.

Signature of Operator/Applicant Bryce H. Haas

Name (Typed or print) Bryce H. Haas

Title/Position (if applicable) Operator

Date 6-29-05

PLEASE NOTE:

Section 40-8-13(2) of the Mine Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps.

Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential information enclosed: **(X)** Yes

FORM MR-REV
(Revised September 2000)

FOR DOGM USE ONLY:
File #:(M/S) M 1039013 ( )
Approved: (mm/dd/yy) / /
Bond Adjustment: ($) _____

RECEIVED
DEC 19 2001
DIVISION OF
OIL, GAS AND MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Telephone: (801) 538-5291 Fax: (801) 359-3940

NOTICE OF INTENTION TO REVISE MINING OPERATIONS

When an operator intends to revise a mining operation, a **Notice of Intention to Revise Mining Operations** shall be filed with the Division. The notice must include all information, concerning the revision, that would have been required if it had been included in the original Notice of Intention (NOI). Ideally, the revision application should be a "stand-alone" document and include all information necessary to conduct a complete review.

"REVISION" means a **significant change** to the approved Notice of Intention to Conduct Mining Operations, which will increase the amount of land affected or alter the location and type of onsite surface facilities such that the nature of the reclamation plan will differ substantially from the approved Notice of Intention. Revisions require a formal public notice of tentative approval and may require a change in the amount of reclamation surety.

"AMENDMENT" is an **insignificant change** to the approved Notice of Intention. An amendment requires Division approval, but does not require public notice.

The Division will determine whether a request for change is significant or insignificant on an individual case-by-case basis.

PLEASE NOTE: When applicable, reference to previously approved information contained in the original NOI can be used (identify volume #'s, section, page #, plate/map #'s, & date of submittal). If possible, please attach appropriate copies of the referenced material as part of the application for revision.

Where possible, please format the application to revise mining operations (e.g., text, maps, tables, figures, etc.) to allow direct insertion into the original NOI as replacement pages, or as a separate addendum to the approved NOI.

The operator is encouraged to use this form as a guide only. Please use extra sheets as necessary to complete each section that follows.

The following information must be included as part of the application to revise mining operations:

I. GENERAL INFORMATION (Rule R647-4-104)

1. **Name of Operator/Applicant:** Bryce H. Haas
2. **Name of Company/Corporation:** B & C Limestone
3. **Address:** 1.1 mile South of Fayette
   Gunnison, Ut 84634
4. **Phone:** (801) 796-6207 **Fax:** (801) 796-6214
5. **Name of Mine/Project:** B & C Limestone
6. **Previously Assigned File Number:** (M / S) 1039/013
   *from original Notice of Intention (NOI)
7. **Location of Proposed Activities:**

   COUNTY Sanpete

   TOWNSHIP 18 South, RANGE 1 East,

   SECTION(S) 32 (Identify to 1/4, 1/4 section) South 1/2 of the South West 1/4

8. **Ownership of Land Surface:**

Private (Fee) ___ Owners Name(s): _____

State of Utah X Public Domain (BLM) ___ National Forest (USFS) ___

9. **Ownership of Minerals:**

Private (Fee) ___ Owners Names(s): _____

State of Utah X Public Domain (BLM) ___ National Forest (USFS) ___

10. **Utah Mining Claim Number(s)** M/039/013

11. **Utah State Lease Numbers(s)** ML 48313-MP

II. MAPS, DRAWINGS & PHOTOGRAPHS (Rule R647-4-105)

Appropriate maps, drawings, plates, etc. should be provided that are pertinent to the revision, or amendment of mining operations. Please provide a revised map outlining the previously approved and the new proposed disturbed area boundaries. These materials should be prepared according to the requirements of Rule R647-4-105.

List map numbers or appendices used for this section:_____

III. OPERATION PLAN (Rule R647-4-106)

Provide a narrative description, referencing any appropriate attached maps or drawings, of the pertinent details of the proposed change(s) in the operating plan. Specific details which are different from those described in the original approved NOI should be included. Identify additional proposed surface disturbance. Include the total number of acres to be affected by the revision or amendment. All appropriate information requirements as outlined under Rule R647-4-106 must be addressed in the application.

See attachment part III

IV. IMPACT ASSESSMENT (Rule R647-4-109)

Please provide information as required under Rule R647-4-109 regarding projected potential surface and/or subsurface impacts which may be associated with the proposed change(s) in mining operations.

See attachment part IV

V. RECLAMATION PLAN (Rule R647-4-110)

Describe how you intend to stabilize the disturbed areas upon cessation of operations. This includes backfilling excavations, grading, sloping or contouring, permanent stabilization of slopes or roads, permanent closure of roads, removal of structures and improvements, etc. Provide cross section of the proposed final contour of the land after reclamation.

Please outline any proposed changes to the originally approved reclamation plan. Appropriate sections of Rule R647-4-110 must be addressed as they may apply to the proposed change(s) in mining operations.

See attachment part V

VI. VARIANCE (Rule R647-4-112)

Please identify any requests for variance from the requirements of rules R647-4-107, -108, or -111. A narrative justification must also be included for each variance request. A discussion of any alternate methods or other mitigating measures should be included, if applicable.

See attachment part VI

VII. SURETY (Rule 647-4-113)

Reclamation Surety:

Indicate whether the proposed activities will change the amount of work required to reclaim the minesite. If significant changes will result, then an itemized reclamation cost estimate

should be provided (and attached) with direct reference to the specifics of the proposed change(s). This information will be used to assist the Division in determining any reclamation surety adjustments required for the operation.

The new surety has allready been taken care of.

VIII. SIGNATURE REQUIREMENT

The application for permit change must include a section similar to the following example:

I hereby certify that the foregoing is true and correct.

Bryce H Haas
Signature of Authorized Officer/Representative:

Bryce H. Haas
Name (Typed or Print):

owner
Title of Authorized Officer/Representative:

Date: 12-18-01

Part III

III Rule R647-4-106 Operations Plan (continued)

106.9 – Location and size of ore and waste stockpiles, tailings and treatment ponds and discharges.

Describe the location and size of any proposed waste / overburden dumps, stockpiles, tailings facilities and water storage or treatment ponds.

There are no waste sites necessary for this operation, therefore, there are none. There is a 50 cu. yard temporary stockpile of topsoil. Reference Section R647-4-106.6 for the location of above.

Describe how overburden material will be removed and stockpiled.

Reference Section R647-4-106.2 for description.

Describe how tailings, waste rock, rejected materials, etc. will be disposed of.

There are no tailings. Waste rock / rejected materials are used during the reclamation process. This material is described as overburden and fines material.

Describe the acreage and capacity of waste dumps, tailings ponds and water storage ponds to be constructed. All impoundments must include the necessary hydrologic calculations to determine if they are adequately sized to handle storm events.

None of the above exist, nor will exist.

Describe any proposed effluent discharge points (UPDES) and show their location on the surface facilities map. Give the proposed discharge rate and expected water quality. Attach chemical analyses of such discharge if available.

Does not apply.

Part III

III Rule R647-4-106 Operations Plan

106.1 Minerals to be Mined

Limestone is the only type of rock quarried on site.

Rule R647-4-106 Operations Plan (continued)

106.3 - Estimated Acreage

Acreage listed here should match areas measured off the maps provided.

Areas of actual mining:	***5 acres***
Overburden/waste dumps:	***12 acres***
Ore and products stockpiles:	***6.25 acres***
Access/ haul roads:	***Section 31 is access to section 32 quarry***
Associated on-site processing facilities:	***Saw shop 50'x70' stud frame building (used to process material)***
TOTAL ESTIMATED ACREAGE:	***23.25 acres***

Note: The above estimate does not include the approximately 1.3 prior area of impact.

WHAT AREA OF IMPACT?

III Rule R647-4-106 Operations Plan (continued)

106.4 Nature of Material including waste rock/overburden and estimated tonnage

Describe the typical annual amount of the ore and waste rock / overburden to be generated, in cubic yards.

Where does the waste material originate?

The overburden originates from the top 12 feet of the quarry. This material is not suited for building stone, as it will not pass "Freeze-Thaw" tests.

What is the nature of the overburden / wastes (general chemistry/mineralogy and description of geologic origin)?

The overburden is water damaged from centuries of exposure and is limestone.

Will it be in the form of fines or coarse material?

The overburden come is both fines and coarse configurations.

What are the typical particle size and size fraction of the waste rock?

Thickness of overburden:	***12 to 20 feet***
Thickness of mineral deposit:	***7 feet***
Estimated annual volume of overburden:	***40,000 cubic yards***
Estimated annual volume of tailings/reject materials:	***Does not apply***
Estimated annual volume of ore mined:	***500 cubic yards***
Overburden/waste description:	***Broken rock and fine mat.***

III Rule R647-4-106 Operations Plan (continued)

106.5 Existing soil types, location of plant growth material

Specific information on existing soils to be disturbed by mining will be required. General soils information may not be sufficient.

Provide specific descriptions of the existing soil resources found in the area. Soil types should be identified along with depth an extent, especially those to be directly impacted by mining.

Soils – The plan shall include an order 3 Soil Survey (or similar) and map. This information is needed to determine which soils are suitable for stockpiling for revegetation. This soil data may be available from the local Soil conservation Service office, or if on public lands, from the land management agency. The map needs to be of such scale that soil types can be accurately determined on the ground (see Attachment I).

(a) Each soil type to be disturbed needs to be field analyzed for the following:

Depth of soil material:
Volume (for stockpiling):
Texture (field determination)
PH (field determination)
(Cross reference with item 106.6)

(b) Where there are problem soils areas (as determined from the field examination) laboratory analysis may be necessary. Soil samples to be sent to the laboratory for analysis need to be about one quart in size, properly labeled, and in plastic bags. Each of the soil horizons on some sites may need to be sampled. Soil sample locations need to be shown on the soils map. Soil analysis for these samples should include: texture, pH, Ec (conductivity), CED (Catoin Exchange Capacity), SAR (waved by L.K.), % Organic Matter, Total N, Available Phosphorus (as P2O5), Potassium (as K2O), and acid based potential (waved by L.K).

Soil samples are being submitted, June 26, 2000, to the Utah State University lab, located in Logan Utah. Results will be forwarded to the Division of Oil, Gas, and Mining, when they are completed.

III Rule R647-4-106 Operations Plan (continued)

106.2 Type of Operation Conducted

Describe the typical methods and procedures to be used in mining operations, on-site processing and concurrent reclamation. Include equipment descriptions where appropriate.

Typical methods used:
In the quarry, approximately 12 feet of overburden is removed to expose limestone seams. Once limestone is exposed, seams are removed by an excavator and loaded into a 10-wheel dump truck. In turn, the dump truck conveys the limestone slabs to another area within the quarry for sorting and further processing. At times rock needs to be "plugged and feathered" to get it into a manageable size. Processing may include a guillotine operation for cutting the rock into building stone, a hand splitting operation used to produce landscape rock, and a tumbling operation for smoothing rock. Once limestone is fully processed, and palletized, it is inventoried for shipment.

Reference "Surface Facilities Map" in Section R647-4-105.2 for a list of equipment used on site.

Concurrent reclamation:
Overburden is removed and located at the rear of the operation. As soon as significant amounts of limestone are removed, and a hole develops, the overburden is back filled into these locations with a dozer. Topsoil / fine material, that has been separated from the operation is used to cover the overburden. Finally, reclaimed areas are seeded during the appropriate seasons of the year. Reclamation is concurrent with the quarrying operation, therefore, any topsoil / fine material, is back-filled almost immediately.

WHAT IS SIGNIFICANT?
TIME LINE

III Rule R647-4-106 Operations Plan (continued)

106.6 – Plan for protecting and redepositing existing soils

Thickness of soil material to be salvaged and stockpiled:

Approximately 4 inches of soil material is removed and stockpiled in area noted on attached map.

WHERE? WHICH MAP? NOT NOTED

Areas from which soil material can be salvaged: (show on map)

Reference above map. All areas within the operations that produce soils are salvaged.

Volume of soil to be stockpiled:

As reclamation is concurrent, the volume usually is approximately 50 cu. yards.

Describe how topsoil or subsoil material will be removed, stockpiled and protected.

A dozer and front-end loader is used to remove topsoil / subsoil and moved to the site noted on the attached map, for storage. The above soils are concurrently being transferred daily to sites of reclamation noted on the attached map in areas "A".

WHICH MAP?

III Rule R647-4-106 Operations Plan (continued)

106.7 – Existing vegetative communities to establish revegetation success

Vegetation – The operator is required to return the land to a useful condition and reestablish at least 70 percent of the premining vegetation ground cover.

Provide the Division with a description of the plant communities growing onsite and the percentage vegetation cover for each plant community located on the site. Describe the methodology used to obtain these values.

The percent ground cover is determined by sampling the vegetation type(s) on the areas to be mined (see attachment I for suggested sampling methods).

(a) Vegetation Survey – The following information needs to be completed based upon the vegetation survey.

Sampling method used:
Number of plots or transects used (10 minimum):

Ground Cover	Percent
Vegetation (perennial grass, forb and shrub cover.	
Litter	
Rock / rock fragments	
Bare ground	
	100%
Revegetation Requirement	70% (at least)

Indicate the vegetation community(ies) found at the site.

List the predominant perennial species of vegetation growing in each vegetation community type.

(b) Photographs – The operator may submit photographs (prints) of the site to show existing vegetation conditions. These photographs should show the general appearance and condition of the area to be affected and may be utilized for comparison upon reclamation of the site. Photographs should be clearly marked as to the location, orientation and the date they were taken.

Reference the attached survey provided by Willow Creek Seed.

Attachment I

Vegetation Cover Sampling

Vegetation cover sampling determines the amount of ground that is covered by live vegetation. It is divided into four categories, which equal 100 percent. They are:

Vegetation: This is the live perennial vegetation. Care should be taken to avoid sampling in disturbed areas that have a large percentage of annual or weedy vegetation, such as Cheatgrass and Russian Thistle.

Litter: This is the dead vegetation on the ground, such as leaf and stem litter.

Rock / rock fragments: This is the rock and rock fragments on the soil surface.

Bare ground: This is the bare soil, which is exposed to wind and water erosion.

Cover Sampling - The following methods are acceptable:

Ocular Estimation

This method visually estimates the percentage of ground covered in a plot by the four components. Plot size is usually a meter or yard square or a circular plot 36 inches in diameter. Ten to twenty plots should be randomly sampled in each major vegetation type.

Line Intercept

Percent ground cover is obtained by stretching a tape measure (usually 100 feet) over the ground and then recording which of the four components is under each foot mark. At least 10 of these transects should be randomly laid out and measured in each major vegetation type.

Soil Survey and Sampling Methods

If a SCS or land management agency soil survey is not available, the operator shall delineate all soil types that will be disturbed by mining on a map. Each soil type shall be sampled for its characteristics and inherent properties. Representative sampling locations should have similar geologic parent material, slopes, vegetative communities and aspects. The sampling locations should be representative of the soil type; and be identified on the map. Sampling shall be at a minimum of one for each soil type disturbed.

The soil map needs to be of sufficient scale so that each soil type can be accurately located on the ground.

Bryce,

Enclosed are two copies of the vegetative analysis. If you need any other copies with my signature on them please feel free to clt, write, or e-mail me. When you are ready to revegetate your quarry, please consider us as a resource. When revegetating an area I usually do not charge for the consultations, but would charge for the seed and labor for the planting. I believe that your site could be revegetated without much problem. I appreciate your business. Please feel free to call me anytime at one of the numbers listed below.

Sincerely, Allan R. Stevens, PhD.

Willow Creek Seed
Allan R. Stevens PhD.
543 E. 900 S. 79-13
Ephraim, UT 84627
(435) 283-4702 (work)
(435) 283-5100 (home)
(435) 283-7501 (fax)
allan.stevens@snow.edu

C & B Limestone Quarry, Fayette - Vegetative Analysis

May 22, 2000

There are two distinct vegetation types on the C & B quarry site: 1) the area on the hill where the quarry is located and where the expansion of the quarry will take place is primarily a black sagebrush community 2) on the West side of the parking area in the valley between the hills is a salt desert shrub community. Twenty 100' line transects were taken in the black sagebrush community, and four 100' line transects were taken in the salt desert shrub community. All transects were randomly located using a random number table. Data was collected using the line intercept method on May 18, 2000. The number of transects taken in each community was determined by the total area of the community. Each individual plant species was identified. Live cover was determined for each species. Results are presented below. Species are listed in three life form categories (grasses, forbs, trees and shrubs).

BLACK SAGEBRUSH COMMUNITY, LIVE COVER

Common Name	Scientific Name	% Live Cover	
Trees and Shrubs			25
Black Sagebrush	*Artemisia nova*	20	
Shadscale	*Atriplex confertifolia*	2	
Thorny Horsebrush	*Tetradymia spinosa*	1.5	
Low Rabbitbrush	*Chrysothamnus viscidiflorus*	1	
Nevada Ephedra	*Ephedra nevadensis*	<0.5	
Common Pricklypear	*Opuntia erinacea*	<0.5	
Utah Juniper	*Juniperus osteosperma*	<0.5	
Forbs			*<0.5*
Globemallow	*Sphaeralcea coccinea*	<0.5	
Buckwheat	*Eriogonum spp.*	<0.5	
Bur Buttercup	*Ranunculus testiculatus*	<0.5	
Grasses			*1*
Indian Ricegrass	*Oryzopsis hymenoides*	0.5	
Squirreltail	*Sitanion hystrix*	0.5	
Sandberg's Bluegrass	*Poa secunda*	<0.5	
Cheatgrass	*Bromus tectorum*	<0.5	
Total			*26*

SALT DESERT SHRUB COMMUNITY, LIVE COVER

Common Name	Scientific Name	% Live Cover
Trees and Shrubs		*20.5*
Carpet Phlox	*Phlox hoodii*	12
Sharp Slenderlobe	*Leptodactylon pungens*	6
Shadscale	*Atriplex confertifolia*	1
Thorny Horsebrush	*Tetradymia spinosa*	0.5
Black Sagebrush	*Artemisia nova*	0.5
Low Rabbitbrush	*Chrysothamnus viscidiflorus*	<0.5
Utah Juniper	*Juniperus osteosperma*	<0.5
Forbs		*<0.5*
Bur Buttercup	*Ranunculus testiculatus*	<0.5
Grasses		*7.5*
Indian Ricegrass	*Oryzopsis hymenoides*	7
Squirreltail	*Sitanion hystrix*	0.5
Cheatgrass	*Bromus tectorum*	<0.5
Total		*28*

Bryce also asked me to determine total cover by rock on the hillside where quarry expansion is planed. Anything over 1' wide was considered rock. Total cover of rock was 31%.

If you have any further questions please feel free to write or call me.

Willow Creek Seed
Allan R. Stevens, PhD.
593 E 900 S 79-16
Ephraim, Ut 84627
(435) 283-4701 (work)
(435) 283-5100 (home)
(435) 283-7501 (fax)
allan.stevens@snow.edu

III Rule R647-4-106 Operations Plan (continued)

106.8 – Depth to groundwater, overburden material & geologic setting

Describe the approximate depth to ground water in the vicinity of the operation based on the completion of any monitoring or water wells in the area. Please show the location of these wells on the base map.

There are no water wells on the operations site, nor is there any surface water of any kind.

SITE #6 ON MAP IS A WATER WELL ??

Depth to groundwater

The quarry operation typically does not exceed 7 feet, once approximately 12 feet of overburden is remove. The site is also located on the crest of a small hill.

Provide a narrative description of the geology of the area and, or a geologic cross section.

Reference US Dept of Interior Geological Survey Map, Gunnison, Utah.

PLEASE INCLUDE

Part IV

Rule R647-4-109 – Impact Statement

109.4 Slope stability, erosion control, air quality, public health & safety

Describe the impacts this mining operation will have on slope stability, erosion, air quality, and public health and safety. Include descriptions of highwall and slope configurations and their stability. Air quality permits from the state Division of Air Quality may be required for mining operations. Please reference any such permits.

Describe measures to be taken to minimize or mitigate impacts to slope stability, erosion, air quality, or public health and safety.

Slope stability is accomplished by rough grading in order to prevent erosion. A water truck is on site to wet dusty areas that occur during operations. Highwalls do not exist nor are planned for future operations.

Public access is denied via "no trespassing" signs posted at the front gate. The front gate is locked after hours. Site personnel wear safety glasses and steel-toed boots as a requirement of employment. Machinery operations and safety are verbally expressed to employees as part of training exercises.

Part A

VII Rule R647-4-110 – Reclamation Plan

110.1 Current land use and postmining land use

Concurrent or premining land use(s) other than mining:

The operations site was previously used for grazing animals. The operations site is concurrently used for grazing animals during a few months each year.

List future post-mine land-use(s) proposed:

While much of the original site terrain consists of bare rock and fragments of rock at the surface the operator assumes that grazing animals will continue on areas where foliage is present.

(Develop the reclamation plan to meet proposed post-mined land use.)

VII Rule R647-4-110 – Reclamation Plan

110.2 Reclamation of roads, highwalls, slopes, leach pads, dumps, etc

Describe how the following features will be reclaimed: roads, highwalls, slopes, impoundments, drainages and natural drainage patterns, pits, ponds, dumps, shafts, adits, drill holes and leach pads.

Describe the configuration of these features after final reclamation.

There are no highwalls, impoundments, drainages, ponds, dumps, shafts, adits, drill holes, or leach ponds on site. Quarry pits will be back-filled with fines materials / overburden, graded to less than a 3:1 slope, and covered with reclaimed soil, then seeded.

Describe the rinsing and neutralization of leach pads associated with final decommissioning.

Does not apply. There are no natural water or man-made ponds on site. There are no leach pads, nor will there ever be during the life of this lease.

Describe how roads will be reclaimed. Road reclamation may include: regrading cut and fill sections, ripping the road surface with a dozer, topsoil replacement, construction of water bars, construction of traffic control bergs: or ditches, and reseeding.

Mr. Haas is seeking a variance from reclamation of the access road that leads to the quarry. He feels that it would be an unfair burden placed upon operations if an existing access road had to be reclaimed at the end of the lease. The access road has been and will continue to be used by ranching operations.

Describe how highwalls will be reclaimed. Highwall reclamation may include: drilling and blasting, backfilling, regrading, topsoil replacement, and seeding.

There are currently no highwalls. This operation will not produce highwalls.

Describe how slopes will be reclaimed: Slope reclamation may include: regrading to a 3 horizontal : 1 vertical (3h:1v) configuration, topsoil replacement, contour ripping, pitting, and reseeding.

Slopes will be excavated, and graded with a dozer to be less than or equal to a 3:1 pitch. Fines material / overburden may be used to form a solid base. Reclaimed soil will be applied in depths of at least 1 foot, raked, then seeded.

IF HE ONLY HARVESTS 4" OF SOIL, HOW CAN HE PUT BACK 1 FOOT

Describe how impoundments, pits and ponds will be reclaimed. Include the final elevations and final disposition of the drainage in and around the impoundment. If the impoundment, pit, or pond is intended to be left as part of the post-mining land use, then

an agreement with the land managing agency / owner is required. Structures to remain must be left in a stable condition.

The remains of the quarry pit will be such that rainwater will not settle in this area. Natural slopes, minus material removed, will be approximately restored during concurrent reclamation.

Include the final size of the impoundment, pit, or pond in acre-feet of storage and the capacity of the spillway to safely pass storm events.

There are no natural water resources on site, therefore, the above does not apply.

Impoundments, pits, and ponds, which are not approved, as part of the post mining land use shall be reclaimed, free draining, and the natural drainage patterns restored.

There are no natural water resources on site, therefore, the above does not apply.

Describe how drainages will be reclaimed. Drainage reclamation would include the reestablishment of natural drainage patterns witch fit in with the upstream and downstream cross-section of existing drainage in the vicinity of the disturbance. Drainage reclamation would also include the reestablishment of a stable channel in the reclaimed reach of channel, using the necessary armoring to prevent excessive erosion and downstream sedimentation.

There are no natural drainages on site, however, the original contour of the landscape will be maintained, minus the limestone removed. In other words, approximately 12 feet will come off of the original contour plus the additional removal of a 7-foot seam of limestone. The quarry cuts into the side of a small hill. Reclamation efforts maintain a gentle slope.

Include cross-sections and profiles of reestablished channels to demonstrate compatibility with existing drainage characteristics.

There were no natural channels on the operations site. Again, reclamation will maintain the same approximate slope. The hill will just be lower by the amount of material removed. Care will be taken to not create a man-made channel that will encourage erosion.

Describe how waste dumps will be reclaimed. Waste dump reclamation may include regrading to a 3h:1v configuration, topsoil replacement, mulch or biosolids applications, contour ripping or pitting, and reseeding. Characterization of the physical and chemical nature of the waste dump materials should be provided.

Original overburden and fines materials will be placed back in the quarry during concurrent reclamation. The chemical and composition of the site should remain relatively unchanged.

VII Rule R647-4-110 – Reclamation Plan

110.3 Surface facilities to be left

Describe any surface facilities, which are proposed to remain on-site after reclamation (buildings, utilities, roads, drainage structures, impoundments, etc.).

The pre-existing access road will remain.

Describe their post-mine application. *Justification for not reclaiming these facilities must be included in the variance request section.*

A variance has been requested for the access road under Section R647-4-105.3. Post mining applications will include grazing usage. Grazing was also a pre-existing condition.

VII Rule R647-4-110 – Reclamation Plan

110.4 Treatment, location and disposition of deleterious materials.

Describe the nature and extend of any deleterious or acid forming materials located on-site.

The operation does not chemically change the nature of the original materials.

Describe how these materials will be neutralized, removed, or disposed of on site.

Does not apply.

Describe how buildings, foundations, trash and other waste materials will be disposed of.

There are no permanent structures on site. All temporary structures, such as fuel tanks, storage sheds, etc. will be removed when the quarry operation closes.

VII Rule R647-4-110 – Reclamation Plan

110.5 Revegetation planting program and topsoil redistribution

Describe the vegetation tasks to be performed in detail. For example, will ripping, mulching, fertilizing, seeding and scarifying of these areas be performed and if so, how will this be accomplished? Correlate this information with the Reclamation Treatments Map.

(a) Soil Material Replacement

In order to reestablish the required ground cover, one to two feet (depending on underlying material) of suitable soil material usually has to be redistributed on the areas to be reseeded. If the stockpiled soil isn't sufficient for this, soil borrow areas will need to be located.

Describe the volume of soils and approximated depth of soil cover to be used in reclamation.

Describe the source of these soils and provide an agronomic analysis of the soils. If soils will not be used describe the alternative material or amendments to be applied in lieu of soils.

Soil analysis is in process at the time of this application and will be forwarded when received from Utah State University.

Describe the methods used to transport and place soils.

Original soils will be transferred from a temporary stockpile to reclamation areas. Areas that were predominately covered with surface rock will be covered with "fines materials, left over from quarry operations. Soil borrow areas have not beer used, and will be avoided. Currently, and for the foreseeable future, original soils will be available for reclamation work.

(b) Seed Bed Preparation

Describe how the seedbed will be prepared and equipment to be used. The Division recommends ripping or discing to a minimum of 12 inches and leaving the seedbed surface in as roughened condition as possible to enhance water harvesting, erosion control and revegetation success. Compacted surfaces such as roads and pads should be deep ripped a minimum of 18 inches.

Pads will be ripped 18 inches, fertilized, then seeded. Mr. Haas is seeking a variance for pre-access road reclamation.

(c) Seed Mixture – List the species to be seeded

Provide a seed mix listing adaptable plant species and the rate of seeding that will be used at the site for reclamation. More than one seed mix may be needed, depending upon the areas to be reclaimed. Keep the proposed post-mining land use in mind when developing seed mixes.

Example

Species Name	Common Name	Seeding Rate (Lbs. pure live seed / acre)

The Division recommends seeding 12-15 Lbs. / acre of native and introduced adaptable species of grass, forb, and browse seed for drill seeding and 15-20 Lbs. / acre for broadcast or hydro seeding. The Division can provide assistance in developing reclamation seed mixes if requested.

(d) Seeding Method

Describe method of planting the seed. The Division recommends planting the seed with a rangeland or farm drill. If broadcast seeding, harrow or rake the seed ¼ to ½ inch into the soil. Fall is the preferred time to seed.

(e) Fertilization

Describe fertilization method, type(s) and application rate (if required).

(f) Other Revegetation Procedures

Please describe other reclamation procedures, such as mulching, biosolids application, irrigation, hydroseeding, etc. that may be planned.

Reference Vegetation Report contained in Section 647-4-106.7. The cost to re-vegetate the operations site was quoted at approximately $400 per acre. Willow Creek Seed has assured Mr. Haas, that replanting the original species would not be a difficult task. While the task of re-seeding will be left to professionals. Under their consultation and direction, Mr. Haas may assist in harrowing, raking, or spreading manure. Willow Creek Seed will determine the application rates of fertilizer, broadcasting methods, and methods of harrowing.

Part VI

VIII Rule R647-4-112 Variance

The operator may request a variance from Rules R647-4-107 (Operations Practices), R647-4-108 (Hole Plugging), and R647-4-11 (Reclamation Practices) by submitting the following information:

1.11 The rule(s) which a variance is requested from (rule number and content).

1.12 A description of the specific variance requested and a description of the area affected by the variance request; show this area on the Reclamation Treatments Map(s).

1.13 Justification for the variance.

1.14 Alternate methods or measures to be utilized in the variance area.

Variance requests are considered on a sit-specific basis. For each variance requested, attach a narrative, which addresses the four items listed above.

Reference Section R647-4-105.3 Reclamation Treatments Map Checklist "c".

"Areas disturbed by this operation, which are included in a request for a variance from the reclamation standards."

1. ***A variance is requested from reclaiming the pre-existing access road in Section 31 leading to and including the same access road in Section 32 where the operation site is located. It is proposed that the access road remain a feature of the landscape, as ranching operations are concurrent with quarry operations.***

2. ***A variance is requested for the approximately 1.3 acres of a pre-existing quarry site adjacent to the current operations site. Mr. Haas has not used this area; however, he has back-filled and graded this area. The area lacks seeding. As this was a pre-existing condition, Mr. Haas feels that the State of Utah should seed the above area. While the previous tenant should have reclaimed the above section, Mr. Haas feels that the State of Utah should share in this burden.***

Describe how shafts and adits will be reclaimed. Reclamation of shafts may include backfilling, installation of a metal gate, installation of a reinforced concrete cap, topsoil replacement and reseeding. Reclamation of adits may include: backfilling, installation of block wall, installation of a metal grate, topsoil replacement and reseeding.

There are no shafts or adits on the operations site.

Describe how drill holes will be reclaimed. Drill hole reclamation must be consistent with the rules for plugging drill holes (R647-4-108). Reclamation of plugged drill holes may include topsoil replacement and reseeding.

There are no drill holes on the operations site, nor is drilling planned during the live of the lease.

Describe how tailings areas will be reclaimed. Tailings reclamation may include dewatering, neutralization, placement of cap materials, placement of subsoil materials, topsoil replacement and reseeding. Characterization of the physical and chemical makeup of the tailings material should be provided.

There are no tailings on site, nor will there ever be during this operation.

Describe how leach ponds will be reclaimed. Reclamation of leached materials may include neutralization or leached materials, rinsing of leached materials, dewatering leached materials, regrading slopes of leached materials to 3h:1v, extending pad liners, placement of capping materials, placement of subsoil materials, mulch or biosolids, topsoil replacement and reseeding. Characterization of the physical and chemical makeup of the leached materials should be provided. Post closure monitoring and collection of drain down fluids should also be addressed.

There are no leach ponds on site, nor will there ever be during this operation.

Note: The Minerals Rules require overall Highwall angles of no more than 45 degrees at final reclamation unless a variance is granted. All dump or fill slopes should be left at an angle of 3h:1v or less. Any slopes steeper than 3h:1v must be reclaimed using state-of-the-art surface stabilization technology. Pit benches exceeding 35 feet in width should be topsoiled, or covered with fines, and revegetation.

<u>Note:</u> Refer to the "Reclamation Map" attached. Areas that originally had vegetation will be re-seeded. Areas were the surface was basically rock will be back filled with original material only in the form of overburden and fines material.

WHO MAKES THIS CALL ON VEGETATION

m/039/013

B&H STONE Supply

B H stone Supply
Bryce H. Haas
Gunnison, Utah
(435)-528-5342 phone
(435-) 528-5522 fax

April 2-2003

RECEIVED
APR - 3 2003
DIV. OF OIL, GAS & MINING

State of Utah
Department of natural recourses
Division of oil, gas and mining
1594 West North Temple #1210
Salt Lake City, 84114

Dwayne Edberg
Permit Supervisor
Minerals Regulatory Program

D. Wayne Edberg:

In regards to the letter that we received on March 25.2203. We are providing you with the description. Of each of our facilities. They are as follows:

(1) Our saw shop facility:
125 feet X 75 feet.
Footing 3 feet deep 2 feet thick
The floor is a concrete floor and is 6 inch thick with no rebar or reinforcement
It is a 2x6 stick frame building with OSB sheeting on exterior
This building has asphalt shingles
The isolation, walls and ceiling is R19
The roof is trusses.

(2) Our office facility:
30 feet x 50 feet on a concrete pad
10 inch thick, poured on the grade with no footings
It is a 2x6 stick frame building with OSB sheeting on exterior
This building has a tin roof
The isolation, walls and ceiling is R19 sheet rocked interior with finished walls
And stone floors
This building has heating and air-conditioning

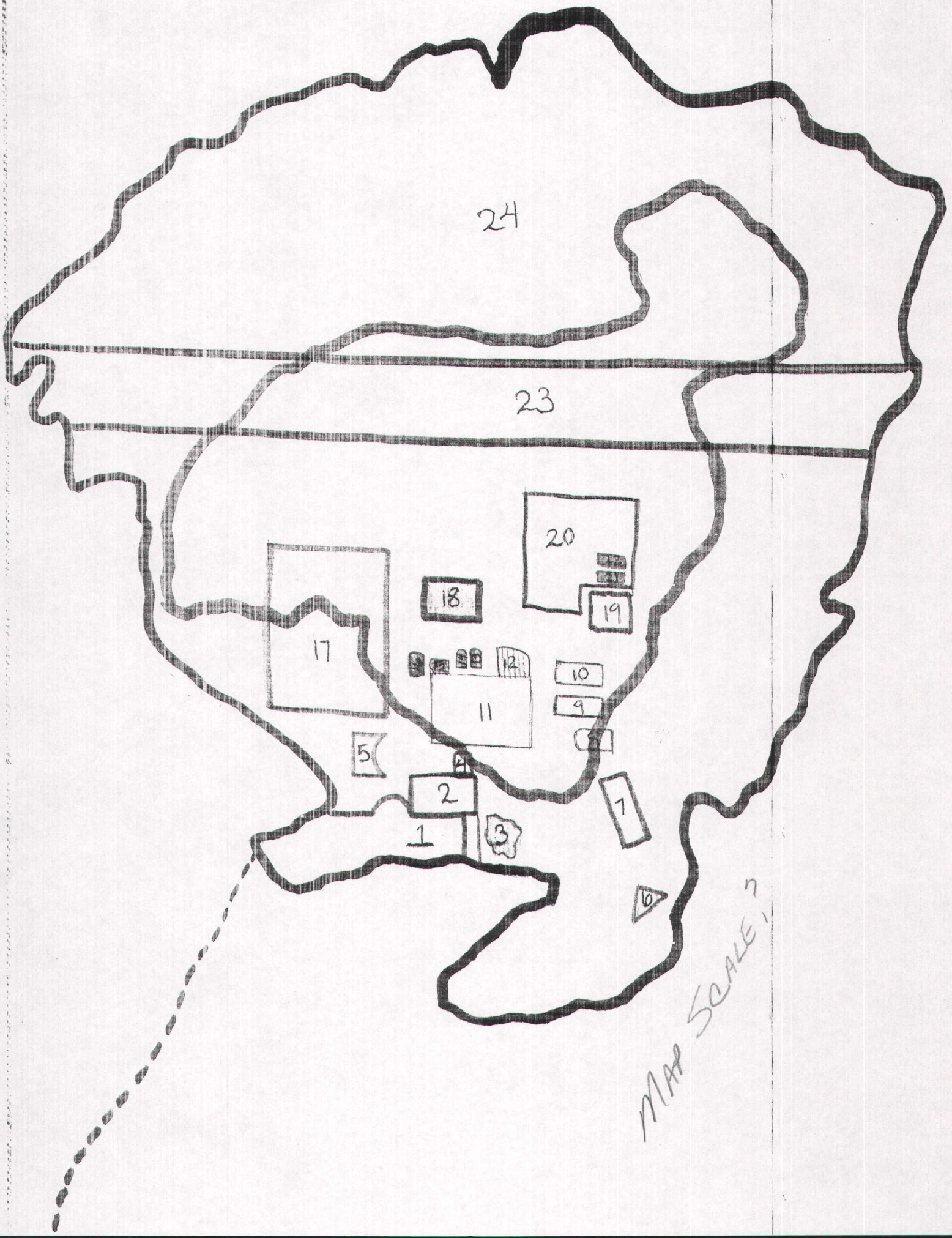
B&H STONE Supply

If you have any question, please call the office, B H Stone Supply (435)528-5342 and we will be glad to help you

Sincerely,

Bryce H Haas
B H stone supply
jmj

331 East 200 South Lindon, Utah 84042 Quarry: (435) 528-5342 Fax: (435) 528-5522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MAP SCALE?

B&H LIMESTONE QUARRY

TABLE OF CONTENTS

OUTER OUTLINE- 4-12-00 DISTURBED AREA
INNER OUTLINE- 8-2-01 DISTURBED AREA
---------- ACCESS ROAD

NUMBER	DESCRIPTION
1	*PARKING LOT*
2	*MAIN OFFICE*
3	*WATER SUPPLY TANKS FOR SAWSHOP*
4	*WATER TANK*
5	*EQUIPMENT"ROCK TUMBLER"*
6	*WATER WELL*
7	*SELF CONTAINED RV*
8	*DIESEL FUEL TANK*
9	*WHITE TOOL TRAILOR*
10	*YELLOW TOOL TRAILOR*
11	*SAW SHOP*
12	*WIRE STOCK*
13	*GASOLINE STORAGE TANK*
14,15	*DIESEL FUEL STORAGE TANK*
16	*GENERATOR*
17	*STONE INVENTORY*
18	*GUILLOTINE PROCESS AREA*
19	*GARBAGE DISPOSAL AREA*
20	*COLUMNS OF CUTTING ROCK*
21,22	*PORTABLE TOILETS*
23	*QUARRY PIT*
24	*OVERBURDEN SITE*